

The Educational Review

A Monthly Record for India.

VOL. XXIII.

APRIL 1917.

No. 4.

All literary contributions, books for reviews, newspapers or magazines, sent in exchange, &c., should be addressed to the Editor, No. 4, Mount Road, Madras. Articles and communications intended for publication in the succeeding issue should, as far as possible, reach the Editor not later than the 20th of the month. The Editor solicits contributions on all subjects of educational interest. Stamps should accompany the MS., if the writer wishes it returned, in case of non-acceptance. The Editor can in no case hold himself responsible for accidental loss.

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A PAGEANT OF SONG.*

BY PRINCIPAL P. SESHADRI, M.A.

THE good Bishop of Durham, Richard de Bury, author of the *Philobiblion*, laments the disastrous effects of war upon literature in the plaintive words: "Then the wise Apollo becomes the Python's prey and Phronesis, the pious mother, becomes subject to the power of Phrenzy. Then winged Pegasus is shut up in the stall of Corydon, and eloquent Mercury is strangled. Then wise Pallas is struck down by the dagger of error, and the charming Pierides are smitten by the truculent tyranny of madness." If he came back to life after his sleep of centuries, he would probably be astonished that in spite of one of the greatest wars ever waged in History, books continued to appear in England, and there was inclination and facility enough, even for publications of the class

under review. The longing for artistic book-making is not very different in spirit and inspiration from the love of true poetry, and the presentation of this Pageant of Song in the famous eleven point Ricardi Fount, with covers bearing the special design of the Three Rings associated with the early Medici, must be welcome to every student of literature. The selected classics have either special appropriateness—unconsciously perhaps—to the present circumstances of the world, or are related to the eternal verities of religion upon which man falls back for strength in his moments of gloom and despondency.

With the sword of England unsheathed for the championship of Liberty, and the great democracies of the West leagued in common fight against the ruthless militarism of Prussia, the selected poems of Wordsworth* read with a new significance. The Happy Warrior who

* *Memorabilia*, reprints of the publications of the Medici Society, by the Oxford University Press. 1s. each.

* The *Happy Warrior* and other Poems.

account such minute details? As a matter of fact, these little unrecognized glide-sounds serve so to fill in breaks between sound and sound that continuous speech becomes possible. Their very usefulness lies in their unobtrusive nature. To give them prominence is very like forsaking the essentials for the sake of non-essentials. We therefore find ourselves in disagreement with those who dwell upon the polyphthongal nature of the sounds referred to above, forgetting that they are essentially composed of two vowel sounds in each case.

There are some phoneticians who include *o:ə* (in "soar") *i:j* (in "seat") and *u:w* (in "shoot") under diphthongs, but we have already maintained our preference for the pure long sounds in such cases.

There are some others who bring *ju:* under diphthongs. But is *ju:* really a "diphthong"? We find the *New English Dictionary* defining a "diphthong" as "a union of two vowels pronounced in one syllable." And according to Sweet also, "if two vowels are uttered with one impulse of stress, so as to form a single syllable, the combination is called a *diphthong*." We cannot see how *ju:* can be called a "diphthong" unless it is regarded as *i* plus *u*: which is evidently absurd. Though it is a well established compound sound, it is no more a diphthong than is any other combination of a consonant and a vowel. It has been already referred to under the *u:* sound.

Though the eight diphthongs mentioned above are treated, for the sake of convenience, (i) as if they are composed of two different vowels of equal length, and (ii) as if they are all compound sounds of equal length, we can easily recognise that, as regards both the composite length and the lengths of the composing vowels, they are vastly varying. Diphthongs may be generally divided into three classes:

(a) *Falling diphthongs* in which the first of the two elements is predominant and is stressed;

(b) *Level diphthongs* in which the two composing elements are equally important and consequently equally stressed; and

(c) *Rising diphthongs* in which the second element is of more importance and as a result stressed at the expense of the first.

In English, falling diphthongs seem to be the most common, though there are some level ones and occasionally even rising ones as in "here", in the pronunciation of some people.

Once again, diphthongs can be classified into three groups according to the lengths of their first elements.

ai, *au*, and *oi* are "quick diphthongs," as Jespersen calls them, their first elements being pronounced rapidly and hence quite short.

ei, *eo* and *ou* are "slow diphthongs," their first elements being longer than their second elements. *i*, *e* and *u* in these cases have developed out of glides. Care should be taken not to make the second elements in these diphthongs too long nor are they to be omitted altogether.

ie and *ue* are intermediate between the two classes referred to above. They are, however, nearer the former than the latter.

As has been said all these diphthongs are stressed on their first elements.

XXV.

eo.

We begin with *eo* in "there" (*θeo*), one of the slow diphthongs. *e* may be defined as an *unrounded—front—half-open—tense* sound and *o* has already been defined as an *unrounded—mixed—half-open—lax* sound. In pronouncing the diphthong, though at first sight the tongue may seem to lower itself considerably for the second element, it is as a matter of fact merely retarded so as to raise its middle part in the mixed position.

We are told that the diphthong becomes almost *æo* in the south of England and no apology may be necessary if we quote one of our

London correspondents: "Nor do I think," he writes, "the vowel of 'air' is rightly placed among the diphthongs, but regard it as a lengthening of that of 'add,' 'Mary' and 'hair' being in my opinion lengthenings of 'Marry' and 'Harry'." *eo*, however, is the form preferred. Indian students sometimes find it difficult to produce the exact sound. They have a tendency to raise the sound to *eo* just like many Londoners, as we are told.

The *e* sound occurs only in the diphthong *eo* which in turn occurs only in *r*-words (with perhaps only one possible exception.)

Spellings (eo).

- | | |
|--------------------------------|---|
| (1) <i>a</i> before <i>r</i> | —Mary (<i>mæri</i>), area, daring. |
| (2) <i>ai</i> before <i>r</i> | —airy, hairy. |
| (3) <i>air</i> | —air, fair, hair. |
| (4) <i>are</i> | —dare, care, mare. |
| (5) <i>ae</i> before <i>r</i> | —aerie (<i>æri</i> —also <i>ieri</i>), aerate (<i>æreit</i>), aeronaut (<i>æerəno:t</i>). |
| (6) <i>aa</i> before <i>r</i> | —Aaron (<i>æərən</i>). |
| (7) <i>ao</i> before <i>r</i> | —aorist (<i>æərɪst</i>). |
| (8) <i>ayr</i> | —Ayrshire (<i>æəʃə</i>). |
| (9) <i>ayer</i> | —layer [<i>læə</i> —but more commonly <i>leɪə</i>], Ayers (<i>æəz</i>). |
| (10) <i>ayre</i> | —Ayres (<i>æəz</i>). |
| (11) <i>ayor</i> | —Mayor (<i>mæə</i>). |
| (12) <i>ear</i> | —bear. |
| (13) <i>eir</i> | —their, heir (<i>θeə</i>). |
| (14) <i>ei</i> before <i>r</i> | —heiress (<i>θeərɪs</i>). |
| (15) <i>ere</i> | —there, ere. |
| (16) <i>e'er</i> (=ever) | —(used only in poetry). |
| (17) <i>aho</i> | —Mahomet [sometimes pronounced <i>mæemɪt</i> . Better <i>mehomɪt</i> of <i>mə'homɪdn</i>]. |

XXVI.

ou.

o is a *rounded—back—half-closed—lax* sound. In Standard English it occurs only in the diph-

thong *ou*. In unstressed syllables *ou* generally becomes *ə*, though *ə* cannot be recommended in the case of words like "window" (*wɪndəu*), "pillow" (*pɪləu*), "swallow" (*swələu*) and "hero" (*hɪərəu*). In the case of words like "November," "omission" and "obedience" both *ou* and *ə* are very often heard, though *ə* is perhaps more common. Sometimes *o* alone is heard in words like "official" (*əfɪʃl*), but *ə* is preferable in such cases.

Care should be taken not to lengthen the second element, nor drop it altogether.

In Shakespeare's time our modern *ou* was pronounced *au* and *vice versa*. And so also in the case of *ei* and *ai*. Of course, this does not excuse the vulgar pronunciation of *ou* and *ei* which is said to be common in London. In India the difficulty is not so great with regard to *ou* as with regard to *ei*. The worst that can happen to *ou* is that its *u*-element may be lost and the diphthong be monophthonged. But in the case of *ei*, there is the additional danger of going back to the Shakespearean pronunciation. We may give but one example. The word "rail" is transliterated as *ரயில்* in Tamil, and we very often hear common people asking one another whether the mail ("mail"—*meil*) has come, or jatkawallahs offering their services with the question, "ரயில் கே-அதாவது, வரலா?"

Spellings (ou).

- | | |
|-----------------------------------|---------------------------------------|
| (1) <i>o</i> | —go, grotto (<i>gro:təu</i>), both. |
| (2) <i>oa</i> | —load, oak, broach. |
| (3) <i>oe</i> | —toe, heroes (<i>hɪərəuz</i>), hoe. |
| (4) <i>o+const.+e</i> | —ode, note, hope. |
| (5) <i>oo</i> | —brooch. |
| (6) <i>ou</i> | —soul, shoulder. |
| (7) <i>ough</i> (<i>gh</i> mute) | —though, furlough, dough. |
| (8) <i>ow</i> | —tow, blow, follow. |

- (9) owe —owe, followed (foloud).
 (10) an —debanch (sometimes di'bouf, but more commonly dibotf).
 (11) an + const. + e —mauve (mouv).
 (12) eau —bean, bureau (bjuərou), Rousseau.
 (13) eo —yeoman (joumən).
 (14) ew —sew (sou), shew.
 (15) og (g mute) —imbroglio (imbroul-jou).
 (16) ol (l mute) —folk, Holmes (houmz).
 (17) oh (h mute) —oh.
 (18) ock (ck mute) —Cockburn (koubən).
 (19) os (s mute) —apropos (æpre'pou).
 (20) ot (t mute) —depot ('depou, or sometimes di'pou).
 (21) hau (h mute) —hauteur (ou'tə:).
 (22) aut (t mute) —hautboy (houboi).
- (2) uer —truer (or truə).
 (3) ure —sure (sue from siur), surety (sueti).
 (4) oor —poor, moor.
 (5) oer —doer (or duə).
 (6) our —tour, your.
 (7) oo before r —moorish, poorest (puerist).
 (8) ou before r —touring, tourist (tuerist).
 (9) ua —usual (ju: ʒuəl).

Spellings for juə.

- (1) ewer —fewer, newer (or ju ə).
 (2) ewar —steward (stjuəd).
 (3) eur —connoisseur (koni'sjuə, or sometimes koni'se:).
 (4) eu before r —neurology (njuərolədʒi).
 (5) ure —cure, lure, pure.
 (6) u before r —purity (pjuəriti), furious, durable.
 (7) your —your (juə).
 (8) ua —dual (or dju'el), subdual.
 (9) ue —duel, fael.
 (10) ewa —renewal (rinjuəl) though rinju:el is also sometimes heard).

XXVIII.

au

We next come to au in "stout" (staut). a may be defined as an unrounded—front—open—lax sound. It occurs only as the first element in the diphthongs ai and au. There is a slight difference, however, between the a's in the two cases. In ai, a is quite clear, but in au it has a tendency to be a little backformed. Care should be taken not to pronounce au as au as some people do.

In the diphthongs ai and au—especially when they are medial and uttered quickly the tongue may not quite reach the i and u positions, very often stopping instead at e and o positions. The aim, however, should be to sound i and u

respectively. As it has been said, au and ai are quick diphthongs. Spellings for auə are noted separately.

Spellings (au).

- (1) ou —loud, mouth, hound.
 (2) ou + const. + e —house, mouse (mauz).
 (3) ough (gh mute) —plough, drought (draut).
 (4) ow —down, allow, how.
 (5) ao —Maori (mauri or ma:ri).
 (6) aou —Caoutchouc (kautfuk).
 (7) au —Sauerkraut (sauək-raut).
 (8) eo —Macleod (mæklaud).
 (9) om (=aun) —compter (kauntə).

Spellings for auə.

- (1) our —our, hour, sour.
 (2) ower —power, shower, dower.
 (3) owa —allowance (əlaʊns).
 (4) ougher —plougher (plaʊə).
 (5) iaour —Giaour (dʒaʊə).

Note.—Strictly speaking, the sounds actually heard in conversational speech will be better represented by aou, but this is a distinction which is not necessary for ordinary purposes.

XXIX.

oi.

o has already been defined as a slightly rounded—back—open—lax sound. Some phoneticians regard the diphthong as a slow diphthong, the first element, according to them, being generally half-long and intermediate between o: and o. But it is better to treat it as a quick diphthong, the length of o being nearly equal to the length of a in ai or au. Very rarely it happens that pupils are not able to distinguish between ai and oi, but more common may be the mispronunciation of oi as ai, which should be guarded against.

XXIII

Spellings (oi).

- (1) oi —oil, coin, point.
 (2) oi + const. + e —foible, poise, voice.
 (3) oig (g mute) —poignant (poinent), coign (koin).
 (4) oy —toy, voyage (voi-idʒ) joy.
 (5) oy + const. + e —Doyle.
 (6) uoy —buoy, buoyant.
 (7) uoi (after q) —quoit (kɔit), quoin (koin).
 (8) huy (h mute) —Lhuyd (or Lloyd—loid).
 (9) eu —Reuter (roite).

Note.—"Royal" is sometimes pronounced roil, but the better pronunciation will be roiel.

XXX.

ie.

i and e have already been defined. Speakers who say uə, pronounce "pier" also as pi'e. But ie is preferable. In unaccented syllables, especially in quick speech, ie very often takes the place of ie.

In the present day English ie has very commonly developed before r in words like "hero," where the long i: sound has given place to ie, just as the long u: sound has been replaced by ue under similar circumstances.

Spellings (ie).

r—words:

- (1) ea before r —fearing.
 (2) ear —dear, beard, year.
 (3) e before r —period, hero, era (iero).
 (4) ee before r —eerily (ierili).
 (5) eer —deer, sheer, peer.
 (6) ere —here, mere.
 (7) eir —weird (wied), Keir.
 (8) ier —pier, tier.
 (9) ier + const. + e —pierce.
 (10) i before r —lira (liere).
 (11) ir —fakir (fə'kie).
 (12) ae before r —aery (iəri or æri).
 (13) eo before r —theorem, theory.

- (14) *ey before r* —eyrie (iəri).
non-r-words:
 (15) *ea* —idea (ai'die), ordeal.
 (16) *eo* —Leopald (lɛpəuld), leon-
 ine (l'ɛnain).
 (17) *eu* —museum (mju'ziəm)
 (18) *ia* —pianist (piənist).
 (19) *ie* —twentieth (twentioθ or
 twentjəθ).
 (20) *io* —chariot (tʃæriət).
 (21) *ion* —various (væəriəs).
 (22) *iu* —radium, iridium (aiəri-
 diəm), osmium.
 (23) *ae* —Israel (izriəl or izrejel).
 (24) *æa* —Spitæa (spai'rjə), æacus.
 (25) *æo* —æon (iən or i'ən), æolus
 (iələs).

XXXI.

ei.

Both e and i have been already defined. The long e: sound, just like the long o: sound, does not occur in Standard English, their places being taken by the respective diphthongs ei and ou. Just like ou, ei also is a slow diphthong, the first element being more prominent. Indian students are apt to substitute e: and o: for the standard English ei and ou respectively.

The substitution of ai for ei is vulgar and should be carefully avoided.*

Spellings (ei).

- (1) *a* —basin, bass (beis),
 fatal, baby.
 (2) *a+const.+e* —fate, base, ale, lake.
 (3) *ai* —tail maid, aim.
 (4) *aig (g mute)* —campaign, champaign
 (flat, open country.)

*The reader will do well to remember what the humorist whom Jespersen quotes says with regard to this point: "Among some of the lower people... bottles are 'labeled' [= 'labelled'] as well as ministers of State!"

- (5) *agnef (= ein)* —champagne (wine).
 (6) *aigh (gh mute)* —straight.
 (7) *ay* —play, may, day.
 (8) *ao* —gaol (dʒeɪl).
 (9) *ah (h mute)* —Dahlia (deilie).
 (10) *ae* —Gaelic (geilik or some-
 times gælik), phaeton
 (feitn). Raeburn
 (reibə'n).
 (11) *aye* —aye (ever).
 (12) *ave (= ei)* —Avebury (eibri, or
 rarely eivberi)
 (13) *alf (= ei)* —halfpenny (heipeni),
 halfpenny worth,
 (heipəθ).
 (14) *auge: (= eidʒ)* —gauge (geidʒ).
 (15) *ea* —great, steak (steik),
 yea.
 (16) *ei* —vein, rein.
 (17) *eig (g mute)* —reign, feign.
 (18) *eigh (gh mute)* —eight, weigh, freight.
 (19) *ey* —they, obey.
 (20) *eh* —eh (interjection).

Note.—There are a number of French words which have been more or less recently borrowed. The pronunciation in such cases oscillates widely between the original pronunciation in French and the English pronunciation of similar words. For the sake of convenience some of the most common of them are given below.

- ecarte —el'ka: tei (a game of cards).
 eclat —el'kla: [sometimes e'kla:].
 naïve —na: 'i: v.
 naïvete —na: 'i: vtet or na: 'i: vti.
 rone —ru: 'el (a profligate).
 ballet —'bælel or 'bælit (a dance).
 bouquet —bu: kel (a nosegay).
 valet —vælel, or more commonly vælit.
 fête —feit.
 demesne —di'mein, or more commonly di'min.
 manège —me'neiz.

XXXII.

ai.

We come last to the diphthong ai in "mine." The *a* has been already defined as an *unrounded front—open—lax* sound. The remarks made under the diphthongs *ou* and *au* have to be borne in mind. The vulgar pronunciation of substituting ai for ei should be guarded against.

The spellings for *aie* are given separately. If a very accurate phonetic representation of the sounds actually heard in conversational speech is required, *aie* will be nearer the mark. But for ordinary purposes this is not necessary.

Spellings (ai).

- (1) *i* —idol, child, idea.
 (2) *ic (c mute)* —indict, indiotment.
 (3) *ig (g mute)* —sign, resign, ensign.
 (4) *igh (gh mute)* —high, night, light.
 (5) *is (s mute)* —island.
 (6) *isle (= ail)* —isle.
 (7) *ie* —die, lie, pie.
 (8) *i+const.+e* —dine, fine, kite.
 (9) *y* —try, sky, my.
 (10) *ye* —rye, dye.
 (11) *eye* —eye.
 (12) *ai* —Kaiser (kaize).
 (13) *aisle (s mute)* —aisle (ail).
 (14) *ay* —ay (yes).
 (15) *aye* —aye (yes).
 (16) *ei* —either (aiðə or i: ðə),
 eider—down.
 (17) *eigh (gh mute)* —height (halt).
 (18) *ey* —eyas (aies).
 (19) *ni* —guiding.
 (20) *ni+const.+e* —guide, guile.
 (21) *ny* —buy.
 (22) *uite (= wait)* —quite (kwaɪt, but "quiet" is pronounced kwaɪet).

Spellings for aie.

- (1) *i before r* —irony (aierəni), Irish, Ira-
 nian.
 (2) *ier* —lier, brier.
 (3) *ire* —fire, dire, shire.
 (4) *iar* —liar, briar (same as 'brier').
 (5) *yre* —tyre, lyre.
 (6) *y before r* —lyra (lalərə), Byron.
 (7) *iro* —iron (aɪən).
 (8) *nire* —quire (kwaɪə).
 (9) *oir* —choir (kwaɪə).
 (10) *ie* —dict.
 (11) *io* —riot, iodine.
 (12) *la* —diaphragm, dial, diagram.
 (13) *ya* —dyak (daɪək).
 (14) *uie* —quiet (kwaɪet).

(To be continued).

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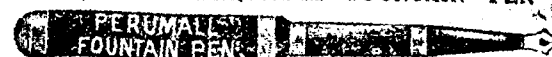
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class-room. (f) Lastly, an unjust and unfair demand is made on Psychology in the guidance of practical teachers. Good teaching depends upon various factors.

True it is that the study of Psychology gives teachers an insight into their work—but besides insight the teacher must possess a sympathetic and loving heart, a good character fitted to serve as an example before his pupils, good teaching power, a sufficient amount of controlling power, and no amount of theorizing can give the teacher these necessary requisites. The result is that practical teachers, "teachers by the grace of God" fail to establish any vital connexion between theory and practice in the school-room.

Still, Psychology has its uses. (1) If the formation of character, the development of all that is good and valuable in human nature, is the aim of education we acquire Psychology as "a handmaid" to Ethics whereby we can have a distinct perception of the teacher's goal. (2) The teacher starts with the child. His educative work acts on the child's rudimentary impulses and aptitudes. Psychology, therefore, renders material aid to the teacher in comprehending his starting-point, the child. (3) The processes of teaching should be clearly thought out by the teacher. The child thinks about an object, and the teacher meantime takes in the child's processes of thinking. He must have, therefore, the fullest appreciation of the mental processes of the child. He must have recourse to Psychology for devising the various consecutive stages and adapting them to the growing mental powers of the child. (4) Lastly, to grapple successfully with the old unscientific view that the teacher's work is a kind of mechanical routine duty, he must have a clear and adequate grasp of the principles of psychology.

In days gone by, they talked of *moulding* the plastic substance of the pupil's mind and character; they talked of *stamping* impressions on his memory. But, thanks to Froëbel and Pestalozzi, the child is now regarded as a living organism where growth is from *within* and not from *without*. The teacher has simply to excite and direct the activity of the child so as to lead to a complete development of its mind.

This is our conclusion. Psychology is a science and Teaching is an art, and this art of teaching grew directly in the school-room. Sciences cannot, and have not produced arts directly out of themselves. An intermediary inventive brain must come in, must use its originality to make the application. A George Stephenson or a James Watt must be forthcoming to apply the laws of steam to the construction of the steam-engine. So, a gifted teacher,—blessed with the endowments of Nature, must show his own originality and resourcefulness to make the art of teaching pleasant and really effective, even if he happens to be a student of Psychology. Prof. James very aptly expresses it—"the Science of Logic alone never made a man reason correctly, nor did a knowledge of Ethics alone make a man behave rightly—as simply an acquaintance with the laws of health never made a man healthy." Similarly an acquaintance with the principles laid down in the pages of Psychology alone can never enable a man to be a good teacher. Go to Psychology for any definite rules of teaching, and you fail. Psychology can only give you certain principles from which you have to deduce certain methods. No two natures can be alike. In a class of thirty children the teacher has to observe as many different temperaments and to confront as many different sets of circumstances; so different methods are to be followed in the case of different children. Psychology can only help the teacher in mastering these different methods. So far as

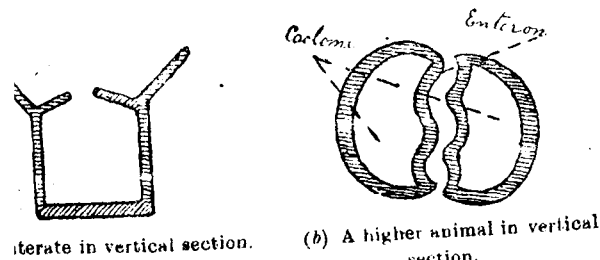
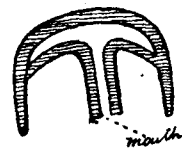


Fig. 7. (The solid parts of the body is shaded).



(a) Medusa, in vertical section.

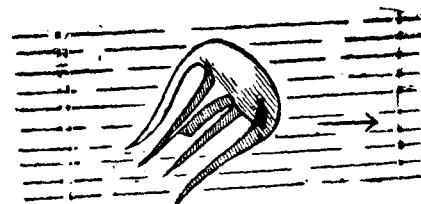
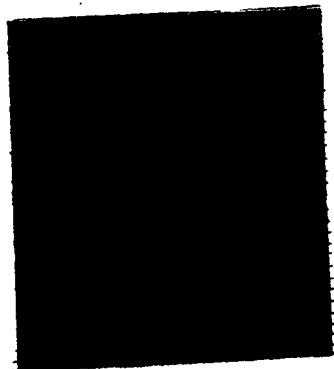
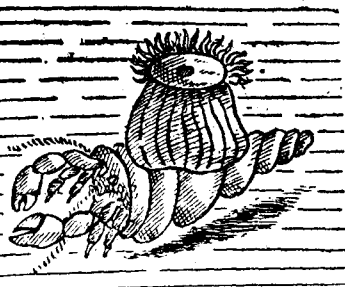
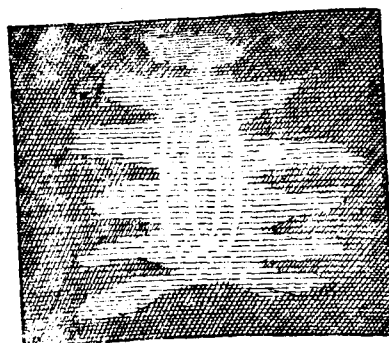
(b) Medusa swimming.
Fig. 9. Medusa.Portuguese-man of war.
Fig. 10.Fig. 8
A sea-anemone on a hermit crab.
(Commensalism.)

Fig. 12. Earthworm

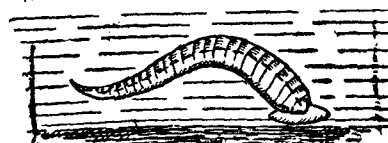
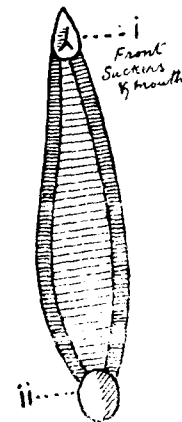


Fig. 13.

Hind sucker. 13b.
Under surface

Leech 13c.

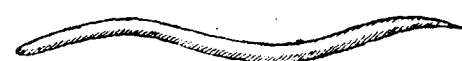
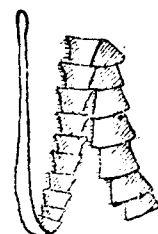
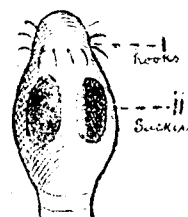
Fig. 13b Leech (under-surface)
Fig. 13c Leech (dissected)
showing sacs for storing blood.

Fig. 14. Roundworm.

15a.
Tape
worm15b. Tape
worm
head
(mounded.)

the practice of education is concerned, Psychology should be looked upon rather as negative than positive. First, it is a touchstone to test if a certain method previously thought out by the teacher will be right or wrong. Secondly, Psychology makes us clear as to what we are about. We gain confidence in respect of any methods we are going to use, as soon as we see that these have theory as well as practice to back them up. Lastly, when we present a matter before the child, we can thoroughly understand the inner workings of the scholar's mind. But the most important essentials of good teaching, viz., sympathy, tact, divination, perception are the teacher's exclusive property, and theory is quite helpless here. Let the teacher, therefore, study psychology by all means, but let him not think that this is the only 'open sesame' to his sacred and trying duty as the maker of a nation.

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STUDY OF ANIMAL LIFE.

III

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HOLLOW-BODIED ANIMALS (CELENTERATA).

FOR want of a more expressive phrase this group has been termed 'Hollow-bodied animals'. The expression needs some explanation.

All the animals of this group have a single cavity in the interior of their bodies, communicating with the outside world by a single opening, which, in addition to functioning as the mouth, serves also for casting out undigested matter. (Fig. 7a). But in the case of animals of all the higher groups there are two cavities in the body (Fig. 7b) (i) the *enteron*, or enteric cavity, through which the food passes, and (ii) the *coelome* or body cavity encircling the former (Fig. 7b). In the group of animals now to be studied there is only one cavity. Since there is no differentiation between the *coelome* and *enteron*, (the single cavity answering for both), the group has come to be called *Cœlenterata*, or *Cœlenterates*. This group includes (a) Sea-anemones, (b) Coral polypes, (c) Jelly-fishes and their allies.

(a) *Sea-anemones* (Fig. 7a) represents a sea-anemone in vertical section. The body is roughly cylindrical, with one or more rings of arms or tentacles surrounding the mouth opening. The lower end is in some cases fixed but is in some capable of slow creeping movement in quest of a convenient resting place. Looked at from the top, sea-anemones are very much like flowers. (Hence the name). Their colouration is extremely charming.

Commensalism:—Not infrequently a sea-anemone is seen attached to a moving body, say, the back of a shell inhabited by a hermit-crab. There results a sort of partnership between the two animals. Both benefit by it. When threatened by enemies, the hermit-crab quietly withdraws to the interior of the shell, leaving

the plant like anemone to bear the brunt of the attack. The anemone, on the other hand, is carried about from place to place, and gets a lot more food supply than otherwise. Such a naturally beneficial partnership between two animals is called *commensalism*, the individuals concerned being called *commensals* (meaning 'mess-mates'). (Fig. 8).

(b) *Coral polypes*:—Indian ladies are usually seen wearing necklaces of red-coral. Red or precious coral is but one of an endless variety of corals. Corals are bits of the skeletal mass of colonies of small coelenterates called *polypes*. A polype has the same structure as a sea-anemone. The difference lies in these facts: (i) Polypes are much smaller, (ii) Polypes are sedentary being fixed in the skeleton they manufacture, (iii) Polypes live usually in groups or colonies numbering myriads each. When one generation dies, the next settles on the remains of the former, and the skeletal mass is added to. A few corals (e.g. the 'fan' coral) are composed of chitin, but the vast majority are made up of calcium carbonate. These masses of calcium carbonate grow to such tremendous dimensions that they form sometimes big reefs [e.g. the great Barrier reef and Adam's (or Rama's) bridge] and sometimes form islands (e.g. The Lakadives). The moment the mass reaches up to the surface of the sea the upward growth stops (as the polypes cannot live out of water) but lateral growth continues. In course of time dust settles on the top and, coupled with the 'weathering' or disintegration of the surface, forms soil. Plant-life and animal-life also appear in course of time.

Corals are variously named according to the formation of the mass. In the chitinous variety mentioned above, the branching is all in one plane. Hence it is called 'fan' coral. Bits of fan coral can easily be picked up along the beach in any of our South Indian coast towns.

Of the calcareous varieties, one branches, like the horns of an elk, and is hence called 'elk-horn'

coral. In another, the surface has folds not unlike the convolutions of the brain. Hence it is popularly called 'brain-coral.' In another interesting variety the polypes form reddish parallel tubes connected at intervals by horizontal platforms. This is called 'organ-pipe' coral.

(c) *Jelly-fishes and their allies*:—If one should take a walk to the Adyar before sun-rise, any day, one would see a number of semi-transparent animals swimming in the water. Each is a jelly fish, or *medusa*.

Medusa:—The body of a medusa is roughly umbrella-shaped with a dome at the top, and a tube hanging down the centre and corresponding to the handle. At the tip of this tube is the mouth opening. This leads to the cavity of the tube which in turn, leads on to the hollow interior of the 'umbrella.' (Fig. 9a). The umbrella contracts at intervals and the water in the concavity is thrust back and the animal is thrust forwards. The animal, in short, moves by rhythmic contractions of the umbrella. (Fig. 9 b).

Hanging down from the mouth and margin of the umbrella, are a number of threads. Touch a medusa and you will feel an itchy sensation. This is because the hanging threads or tentacles are armed with rows of stinging cells which inject a kind of poison into your skin. Though man is not much affected by these stinging batteries, little fish and other small animals die at once, and are eaten by the medusa.

Another interesting point about these jelly-fish is that more than 96% of their bodies consists of water.

Portuguese-man-of-war:—If you should take a stroll along the beach after a windy day, when the tide is receding, you are likely to find, stranded beside the water margin, pale blue bladders full of air, with a number of dark-blue bodies and long threads, attached to them on one side. Such a thing is called the Portuguese-

man-of-war. You should not handle it with the bare hand for fear of a sharp sting. Pick it up with a pair of forceps and drop it into a bottle partly filled with sea-water.

Though, for convenience, we term it an animal, it is not strictly one animal but a colony of animals. One member of the colony is transformed into an air bladder, the float, from which the others hang down. The stinging batteries are very powerful, and hence the name.

Protective colouration.—The most remarkable feature about the Portuguese man-of-war is its peculiar colour. When floating on the surface of the sea, its presence can hardly be detected. This is an instance of *protective colouration* for the animal is coloured exactly like its natural surroundings and is difficult of detection by its enemies and prey alike. (Fig. 10.)

Phosphorescent forms:—You would have seen on dark nights the light emitted by glow worms. The glow is due to the presence of a substance called phosphorus, and is called *phosphorescence*. Several members of this class exhibit this phenomenon. Vast areas of the sea inhabited by such animals are aglow at night, as can be seen from the decks of ships. Fig. 11 represents *Beroe*, a common phosphorescent form. Almost all coelenterates, with very few exceptions, are marine.

Summary.

Difference between coelenterates and other animals.

Sea anemones:—Description: commensalism.

Coral polypes—How corals are formed—reefs, islands, varieties of corals and how they are named.

Jelly-fishes and their allies:—

- (i) *Medusa*:—Structure—movement—stinging—bodies contain a large amount of water.
- (ii) *Portuguese man-of-war*:—Division of labour in the colony—stinging—protective colouration.

(iii) *Beroe*—Example of a phosphorescent form
To the Teacher.—This group of animals being almost wholly marine, can be best studied only in coast-towns.

Anemones (4 syllabus).—Teachers in Madras have the advantage of the Marine Aquarium for studying anemones. Those in the Southern districts can best study them near Rameswaram. This is one of the best places in the world for studying marine fauna. The water is so beautifully clear that the animals at the sea bottom can be clearly seen in all their natural beauty. Teachers in the Northern Circars would do well to visit Vizagapatam. On the beach is a series of rocks jutting into the sea. The townsmen call these 'Theerthapurallu' తీర్థపురం. There are several hollows and crevices in these in which a few varieties of anemones can be studied at low tide.

Corals.—Some of these again can be studied in the Marine Aquarium at Madras. All teachers of Natural Science would do well to keep a collection of corals in the school museum. Pilgrims to Rameswaram can easily procure a good collection. I was able to procure a few specimens in the evening bazaar attached to the Moore Market. In the annual Flower-Show at the Agri-horticultural Society's premises, Teynampet, one or two stalls sell stuffed animals, shells and corals.

Jelly-fish. These can be best seen by boating out in the sea. The next best course is to visit the mouths of rivers. They are also sometimes stranded on the beach and can be picked up made to float in a basin of water, and studied. If they are picked up almost immediately after being stranded, one can feel the itchy sensation referred to above.

Relate the story of the Gorgan Medusa, to justify the name Medusa.

Portuguese man-of-war. This can be picked up and studied in the manner above described. Never handle it with the bare hand. If a good specimen cannot be procured, make a cut along

the top outline of the animal in the figure, and demonstrate protective colouration by introducing a tinted card into it.

Phosphorescence.—Demonstrate this by going into a dark room and scratching the palm of your hand with the tip of an ordinary lucifer match-stick.

WORMS (*Vermes*).

The popular heading 'worms' includes several groups of animals, with widely different characteristics. Some are land forms while others are inhabitants of either pieces of fresh water, or the sea. But, broadly speaking, almost all are characterised by an elongated body; food is taken in at one end and undigested matter cast out at the other. The former end, may, for convenience be termed the head, and the latter, the tail, though the head and tail are not usually sharply marked off from the rest of the body. Let us now study a few worms.

The Earthworm.—When the ground is rendered miry after a shower or two of rain, you can see a number of earthworms crawling about. Pick up a fairly big sized specimen and study it. The colour is dark-red. The body consists of a series of rings. The end which leads in movement is the front end; and here you can see the mouth opening. A little behind the mouth-end, there is a region devoid of rings. This is called the *clitellum* and bears the openings of the reproductive organs. (Fig. 12).

Pass your hand along the body in either direction. When running your finger towards the head, you will feel the body a bit rougher than when stroking it from the head to the tail. This is due to the presence of a number of small chitinous bristles, pointing backwards. In fact these give the animal a grip of the ground, as it crawls along. If a bit of the skin is seen under the microscope, these bristles are easily seen.

If you go out into an open field early in the morning you will see little mounds of earth. Each consists of a number of pellets heaped together. The earthworm while travelling underground, swallows lumps of mud. (Fig. 12a). As each lump passes along the food passage all the

food matter in it is absorbed, and the mud that is left is deposited on the surface of the ground in the shape of the aforesaid pellets. Earthworms therefore are Nature's agents in turning up the soil, and should therefore be considered to be the friends of man.

Another way in which they are useful to man is by serving as bait for fish.

The earthworm has both the male and female sexual organs. Animals which possess organs of both the sexes are said to be *hermaphrodite*. The word is derived from two, Greek words, *Hermes*, the name of a god (Mercury), and *Aphrodite*, the name of a goddess (Venus).

In addition to the normal method of sexual reproduction, the earthworm can, as an emergency measure, reproduce asexually. If an earthworm is cut into two and restored to the soil, each half will, in time, grow into an entire worm. This is Nature's provision for an animal which is constantly in danger of being cut up by the spade of the digger and the plough of the farmer.

The common (medicinal) leech:—Parasitism—When one animal, instead of being able to procure food independently, depends on another animal for its food supply, the former is called a 'parasite' and the latter is called its 'host.'

The common leech is a good example of an external parasite, i.e., one that infests the exterior of the body of its host.

Put a leech in a glass aquarium and observe it creeping up against the sides. The back of the body is dark green (Fig. 13) with a row of black dots running along the middle. The under surface is yellow, or orange coloured, with two dark bands running along the margin (Fig. 13b.) At either end of the body are two adhesive discs or *suckers* which help it to crawl along even the smoothest surface. The leech fixes itself by the hind sucker (Fig. 13bii) extends its body in search of another hold. It then fixes itself by the front sucker (Fig. 13bi), lets go the hinder hold and contracts and loops the body so as to bring the hind sucker near the front one. By repetitions of the same movement the animal moves along.

Now prick the animal with a pin point, or do something to terrify it. You will see that it lets go both the suckers, and swims away rapidly by a wavy movement of its body, much like a snake. This, however, is not the normal method of progression. Observe the front sucker through the sides of the aquarium. You will see a tri-radiate depression. The centre of this is the mouth. Each of the three grooves going out from it lodges a jaw set with several rows of minute teeth. When the front sucker comes in contact with a victim, the three jaws are brought into play. They rasp away the skin till blood is got at. Vast quantities of the blood are sucked in at a time. The leech never lets go its hold till it has had its fill. All this blood is stored in peculiar sacs along the food passage (Fig. 13c) where it remains a long time without clotting, and serves to nourish the animal till it lights upon another victim. A well-fed leech can starve a long time.

If a leech gets hold of you, rub some salt, or lime (chunam) on its back promptly. It will let go its hold, shrink up, vomit forth blood, and die. I am told that a pinch of snuff rubbed on the back of the leech produces the same effect, but have never actually tried it.

On account of its sucking powers, the common fresh-water leech is used by doctors for bleeding patients. It is hence called the medicinal leech in contradistinction to other varieties, some of which live on trees. Still others are marine.

The Round-worm (Fig. 14).—This is a good example of an internal parasite and infests the human intestine. It is round and long and yellowish white in colour. The front end is armed with barbs, with which it fixes itself to the walls of the intestine, the rest of the body hanging freely in it. This animal has no need to wait like the leech for periodical supplies of food, but, being an internal parasite lives surrounded always by the food ready digested for it by the host. It has therefore no digestive organs of its own nor sacs for storage of food like the leech, for it does not need any. It absorbs food through the thin walls of its body. The

absence of digestive organs is an instance of *degeneration due to parasitism*.

The interior of the body is mainly filled with the reproductive organs. For parasites are generally very prolific in reproduction, to make amends for their large death rate due to the chance of their failing to secure hosts and to the persecution they undergo.

The Tape-worm (Fig. 15).—This is also an internal intestinal parasite of man. It is not a common pest here. The animal has a ball like head (Fig. 15a) provided with a ring of recurved hooks to give it a grip of the intestinal wall. To make assurance doubly sure there are four suckers behind the hooks, to help in attachment. The rest of the animal consists of a series of flat segments (hence the name). The segments contain practically nothing but the reproductive organs. They gradually increase in size so that the terminal segments are the biggest. The reproductive organs also are ripest in these.

The most remarkable thing about the tape-worm is its passing through an *intermediate host* before getting into man again. The terminal segments containing ripe eggs are detached and pass out with human excreta, and are in course of time eaten by animals like the pig. This is the intermediate host. The egg case dissolves away, and the embryo comes out armed with six sickle-like organs. It cuts its way from the intestine of the pig to its flesh, and there lies dormant. If this flesh is eaten by man in an improperly cooked state, the little animal (which by now has a head with hooks, suckers and all) reaches the *permanent host* and goes on developing segments full of eggs as before.

Summary.

The Earthworm—Appearance—movement—feeding—uses to man, (i) turning up the soil (ii) serving as bait for fish—Reproduction, sexual and asexual.

The leech:—Parasitism—external appearance—movement (two ways)—feeding—how killed—use to doctors.

(b) The study in some detail of syllabuses in *Grammar, and Oral and Written Composition*—and the correcting of written exercises.

(c) An intimacy with the outline of English literary history adaptable for use in the higher forms—and acquaintance with the principal specimens in prose and poetry with a due appreciation of their value for language training.

(d) The teaching of literary technique in outline—chiefly, of ballads, songs and other poetic forms.

(e) Dramatic and poetic recitation.

(f) Discussion of subjects and lessons.

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Witness the present European war and see if the foregoing conclusions are not correct. See if the subject moral training of the younger generation does not force itself upon all thinking people, who have the welfare of the country at heart, all over the world. In what are known as the "Post War Reforms" this all-absorbing subject occupies a very conspicuous place and people are greatly bestirring themselves to try to realise the inseparability of religion from politics, morals from secular education, and education from instruction. At last there has come to stay a dawn of consciousness and nations have come to realise that "the fear of the Lord is the beginning of wisdom and that knowledge without religion is the enemy of mankind."

So then no body need doubt the utility of a good moral training in the school room as well as in the broader outer world. Von Humboldt says "Whatever we wish to see introduced into the life of a nation must be first introduced into its schools." The doubt is the result of the fatal distinction that such

people like to make between the home and the school and the school and the State.

While all are agreed or compelled to agree that in the words of Tyndall "the great aim of education should be to raise the life to a higher level and elevate the general tone of thought," there are we are told great thinkers in England, who are making experiments—at a great cost of course—to see if the moral instruction and moral training cannot be given independent of religion. The desirability or even the necessity of a costly experiment of the London Society referred to above does not appeal to the majority of people and consequently let us not trouble ourselves any more about it here.

Secondly, it might be argued where is the necessity for the introduction of moral and ethical training in schools, if all such training is based upon the experience of the world and if children, so long as they remain in schools, have no such experience whatever. True. They think it unnecessary because they do not think that a school is an institution which in its broadest sense is a small world in itself and which, in fact, prepares the children to take their proper place in the world as men and women. Apart from the fact the mission of the schools is the preparation for life, it would be false economy not to take advantage of the varied experiences of our ancestors, not to derive the indescribable benefit from Libraries and lives of the eminent men of the past, not to enshrine in our heart of hearts the principles and lofty ideas, to preserve which the various nations of the world in all ages have fought and died, and not to read history which according to Burke "is the preceptor of prudence" and morality.

Having answered all these arguments, it remains for us to consider if there can be a uniformity of moral and ethical training for all schools in general. A uniform training is to us an impossibility. Every country, every community, every sect and in fact every school has got its own ideals to strive after. Every institution has got its own standard of morality and while agreeing in the main with regard to the ultimate end and aim, there is as wide a diversity as possible in point of the details of the programme. To take examples, the Free Sons of England would not for life fall in with the dollar-worshipping Americans; nor the highly spiritually evolved souls of India with the abominably materially advanced Germans.

There is one other issue that has to be successfully tackled. If a uniformity of moral training—with reference to boys' schools is outside the pale of practical politics, the question with regard to girls becomes all the more grave and complex. The East and West do not see eye to eye in this, as in many other respects. Taking the West alone into consideration, there is hardly any one solution for the problem. Rousseau advocates two systems of education; one for boys and the other for girls. While in the one he exhorts us to devote all our time and energy for the production of men, not weaklings, irrespective of the line of occupation which they may be called upon to take in after life, in the other, he lays down as a rule that women should be subservient and that their whole and sole object should be to satisfy their husbands to their hearts content. Shelley, who is the inspirer of hope to the hopeless, asks "can man be free if woman be a slave?" Witness the woman delegates in the American Congress and the woman Suffragist's movement in England and the lady lawyer in Allahabad in India and draw your own conclusions. Having said that Ethical and Moral Training

is an indispensable item in the curricula of studies for all schools—both boys and girls, we shall for the rest of the space consecrate ourselves with the broad lines on which such training should proceed in Kindergarten schools. Music, play, care of pet animals and plants, dance, and acrobatic performances, children's day, dramatization of stories both imaginative and literary and lastly finishing of half told stories are some of the items which if conducted properly will greatly help us to reach the goal we have in view.

Besides these auxiliaries, the regular class subjects themselves present very many opportunities for moral training.

Music:—The Indian music which has in its favor endless varieties of tunes and vast possibilities to achieve, will, with its divinely inspiration, create a thirst and a longing for songs sweet and ennobling. If

Music—the fiercest grief can charm
And fate's severest rage disarm,
Music can soften pain to ease
And make madness please

and if

He who has no music in himself
Nor is not moved by the concord of music
is a traitor, do we require any other subject which will help us to accomplish our object, or do we stand in need of any great argument for making music an integral part of our curriculum?

Dryden tells us in his "Alexander's Feast" the "Music has won the cause." We are well aware of the "Pied Piper of Hamelin." "Ye Mariners of England"—this ballad song brought the people to their sense of responsibility and duty. The historic songs of Rajaputana made the people of that country most chivalrous. The Persian songs of Baber won the First Battle of Panipet.

If childhood is the most impressionable period and if this is the period when ideas

take their firmest roots in the mind, we should lose no time in imparting moral instruction by means of songs accompanied by music. For children life is nothing but play and mirth and hence all the moral lessons on patriotism, obedience, truthfulness, etc., could be portrayed by means of songs.

The Folklore songs embody the duties and responsibilities of women in general.

Play:—If music is the spirit, play gives us the necessary wings with which to fly to the summit of morality. The World-Victor's Victor—Duke of Wellington—won the Battle of Waterloo on the play grounds of Eton. Take for instance foot-ball play. Friendly rivalry, patience, perseverance, cheerful temperament in defeat and victory, obedience to constituted authority, hearty co-operation, strength of union and weakness of dis-union, the force of concentrated energy, sympathy for the defeated, due deference to elders and leaders, all these are the eloquent lessons which play-grounds teach.

Care of pet animals and plants:—"The blessed are the merciful." The quality of mercy should from the nursery be deeply ingrained in our pupils. We must create in them a love and reverence to all living things. All things are sacred. "Turn, turn, thy hasty foot aside, nor crush that helpless worm" should not only be learned but lived as well.

The care of pet animals and plants, in turn teaches gentleness, kindness, proper care with regard to food, drinking, preservation from hostile elements and most important of all shows that interdependence of man, animal and plant. Our pupils learn that "Nought on the world doth exist but to the world some special good doth give."

This part of their work, besides providing

sufficient safeguards against the destructive nature, creates an æsthetic sense of beauty and lays the acts at the root of selfishness and egotism.

Dance and acrobatic performances:—Co-operation is the wheel, love is the guiding force, inspiration is the driver, hospitality is the seat and happiness of duty is the destination. Here they learn that the reward of their labour does not consist in winning the incessant applause of the audience but in having done their duty to their satisfaction. Perhaps they may be told that a greater, nobler duty is awaiting them when they leave their school and the enthusiasm, which enable them to win their victory on the stage in the school, would equally enable them to win more precious laurels on a magical stage in the world.

Children's day and dramatization of stories:—These two superbly interesting functions bring in the first place the parents and teachers together that they may compare notes and discuss questions affecting the school and children, secondly the teachers and the taught, though in the regular hours of the school work, they have to stand at respectable distances and go through all those paraphernalia called the school discipline, stand on one common level and platform, think together, to work together, and co-operate in every way, and thirdly they have one common aim to strive for, one method to go by, and one subject to study. If all other resources fail, here is a splendid opportunity for the teacher to study his pupils carefully and well and the pupils also by coming into intimate contact, acquaintance and relationship will get to know their teacher and love him. If both parties understand

each other, there is no need for rods and ferules. Punishments will slowly give way to congratulations. Mischievousness will be substituted by righteousness. The teachers will no longer put on superior airs and dignified looks and the pupils cease to conceal their thoughts, good and bad, but make an open confession to their masters. Straight-forwardness and manliness take the place of cowardliness and sheepishness. The teachers by their age, knowledge, experience and tact guiding the pupils, who are young and who need careful handling and sympathetic direction. In a word, a pleasant society is created in which each member discharges his or her duty with the best ability he or she is capable of.

Before the ideal conditions and ideal systems are secured what ought we to do in training our pupils morally to the best advantage of the society of which they are the component parts? Want of a good locality, want of money, inability to establish a pleasant environment, differences of opinion with regard to the system of imparting moral instruction, etc., should not hamper us in our work. We have to strain our every nerve and even going to the length of some self-sacrifice we have to do it. When we secure money we lose the plasticity of childhood. When all other obstacles are cleared, the child is past that stage and becomes impenetrable. Hence this is the time to be up and doing.

There is one other thing that is to be considered in this connection and that is "is it possible to dispense with punishments altogether from the school room?" We say possible. A correct understanding of the child, a firm grasp of the principles on which education should proceed, an accurate knowledge of the

subject to be taught and the efficient and dramatic method of teaching will enable us to get on with our work smoothly without the aid of cane. Besides caning is a sign of weakness. When there is a sharp difference of opinion between the grown up teacher and the crawling child, the former finding himself at his wits' end to meet the ever inquisitive child, often has recourse to this terrible weapon, to wield it against his poor, helpless, innocent victim. This is almost criminal in nature and shows the moral cowardice of the victor. If corporal punishments are entirely given up, then half the moral training is given.

It will be as well to think over some of the disabilities that lie in the way of moral training in Indian schools. India is a continent with various peoples, languages, religions, castes, colour and creed. Its ancient civilization, its venerable traditions and the scientific habits are constantly and daily modified by the Western civilization. There is a tug of war between spiritualism and materialism. To add to the confusion we have numerous missionary institutions, who under the guise of imparting secular education invade the conscience of the poor unfortunate students, who happen to be within their reach. So far as the Kindergarten schools are concerned there is not much difficulty. But higher up, the problem becomes almost a riddle. To solve it there is but one way. We have to introduce in our schools and colleges what is called the "Conscience Clause" by which each student follows and studies the religion to which he belongs and the training and text-books used for the purpose are common and are applicable to all religionists. This will satisfy not only the parents but the scope of the school curriculum as well.

V. N. RANGASWAMI AYYANGAR.

SCHOOL GARDENS.

WHY SCHOOLS SHOULD HAVE GARDENS.

1. A school surrounded by a beautiful garden helps to make school life attractive.
2. The sight of beautiful flowers with various colours creates in boys love for the beautiful or in other words develops the aesthetic sense.
3. By the contact with various flowers and leaves of different tenderness and seeing the result of roughly handling them boys are likely to learn kindness and tenderness towards other animals.
4. By watching every day growing branches and leaves boys can get some idea of growing organism in general.
5. There being a good deal of resemblance between the treatment of plants and the treatment of children, teachers also are likely to learn some useful things about their own profession.
6. If plants be carefully selected they prove useful in teaching geography and can be used with advantage in connection with English lessons as well.
7. If we have industrial and economical plants they will be useful to give a general idea of the life of people.
8. Some plants like "रिक्त" can be useful to illustrate the history of civilization.
9. Leaves and flowers will be useful to drawing master in his work.

THE SELECTION OF PLANTS.

Whether it is a garden connected with a school, or it is simply a garden kept by a Municipality for the recreation and pleasure of the public or it is only a garden surrounding the house of a private gentleman as soon as the word garden is uttered there come before our mind's eye a number of plants with flowers

of different colours with or without smell, arranged in some geometrical design with shells forming the border, &c., &c. In short that is the popular idea of a garden. But how far schools can have their gardens also on these lines is a question. I think the school gardens should be different from this. The above ideal may do for gardens mainly kept for pleasure and recreation. But in the case of schools our main object in having gardens should be education first and pleasure afterwards. If we accept this as our ideal, I think we must make a departure from the accepted ideas about a garden and have plants of the following kinds:—

- (1) Plants as will be useful to illustrate our Geography and English lessons.
- (2) Economical plants bearing upon the life of people.
- (3) Specimens of some select peculiarities of plant life in general.
- (4) Flowering plants that can supply flowers throughout the year turn by turn.

Caution:—Plants that require much watering should better be avoided.

MANAGEMENT AND WATERING.

Though it is a disputed question, I think we can make boys water the plants without much difficulty. But extreme care is necessary to bring this about. Under no circumstances should the boys be led to look upon it as a task. It should be so managed that the boy should take interest and feel delight in doing it as they do in playing games. I think it can be managed by entrusting the supervisory work to a teacher who is popular both among parents and boys, and I think it is quite possible to find at least one such teacher in every school.

For the success of the above scheme it is absolutely necessary to take care to see

anything that comes under the head of vegetables is not cultivated in the school garden. And if at all cultivated the Assistant-masters as well as the Headmaster should scrupulously avoid the use of them. It should be looked upon either as Government or boys' property and should be distributed among the boys working in the garden. I think the latter plan would be better.

HOW TO SECURE PLANTS.

(1) Boys coming from different districts can be induced to bring plants or seeds—better plants—when they come back to school after vacations. I think it should be looked upon as something to be proud of, by every boy to leave behind him as his sweet memory some plant or tree that goes on giving flowers or fruit or serves such other useful purpose.

(2) Schools, if they care, can exchange plants either direct or through some central agency organized by schools.

(3) To purchase them. But very little can be done in this way unless there is some special Government grant for this purpose.

PROTECTION FROM INSECTS.

Knowledge about materials that can destroy various insects is necessary. Personally I do not know anything about it, but it is highly desirable to have a small pamphlet dealing with this problem. It should suggest cheap Indian articles that can be used in this connection with advantage. The same can be said about manures as well. What is necessary is not a list of a number of costly foreign manures, but a list of such articles either leaves or ashes or things like it, as can be readily had here and as are quite within the reach of an ordinary man.

G. B. NITSURE.

IS OUR EDUCATIONAL WORK YIELDING THE HIGHEST POSSIBLE RATE OF INTEREST ?*

IN the financial world even a slight difference of percentage of interest is considered a very important matter. Men spend much time and thought shifting funds so as to secure the highest possible rate, and they avoid unnecessary discounts as they would a contagious disease. We are all concerned when we discover a leak in the pipe. Something is being wasted. We are losing what we need not lose, failing to receive what we might receive if we took a little more trouble.

As teachers, we deal with a commodity of the greatest value. If we are getting for this a lower rate of interest than we might secure, if there are preventable leaks in our educational pipes that drain off a large part of our output, this should cause us the most acute concern. What proportion of the product that we generate in our schools is available for the most important uses of life? How can we shape our curriculum and methods so as to secure a higher proportion of available product?

There are two ways in which we might presumably increase the net results of our educational work: first, by generating a larger quantity in the school; second, by generating a quality that will transfer to life at a higher rate of interest and with less leakage. Many teachers study only the former plan. They try to teach more thoroughly and cover more ground of the traditional subject matter with the traditional methods. That any other subject or methods would yield better results, they refuse to believe.

For over ten years there has been considerable discussion on what is known as the

* Published by kind courtesy of Mr. B. J. Rockwood B.A., Principal, Cole's Memorial High School, Kurnool.

subject of formal discipline, on the extent to which mental discipline gained in one study is transferable to others. Within the past two years several additional books and articles have appeared, expressing some differences of opinion on various details. For the benefit of those missionaries who may be altogether unfamiliar with this controversy, and for those who may have seen only one side of the discussion, it seems worth while to review briefly some of the evidence and conclusions that have been offered.

We all realize that of two boys beginning to learn to play tennis, other things being equal, the one who has played base ball and other striking games will probably learn more rapidly than the one who has never played such games. In other words, practice in striking a moving ball is apt to transfer. But other things may not be equal. The unpracticed boy may have such superior aptitude for muscular co-ordination that he will soon forge far ahead. Native ability is an important element. We all recognize that the experienced player is under a handicap when he plays with a borrowed racket. His previous practice suffers some loss in the transference to slightly different conditions. Finally, we realize the importance of learning good form at the very start, because bad habits are hard to overcome. Practice may even operate to hinder transfer. On the other hand, we should not expect skill in tennis to furnish any adequate criterion of probable ability in piano playing.

Common sense would recognize close analogies to these facts in more purely mental activities, but there are some general assumptions rarely if ever consistently held, which nevertheless often serve to support practices which should be contradicted by common sense. We hear that Mathematics is for the mind what Gymnastics exercises are for the

body. If closely pressed, probably few would hold that mathematical training is of equal benefit to every form of mental activity, but such talk is constantly used to justify a heavy overloading of the curriculum with mathematics. We hear that mathematics strengthen the reasoning faculties and that inflected languages promote observation, with the implication that all types of reasoning will be adequately strengthened by the former study, and all types of observation by the latter. The real point at issue in both cases is not whether there is some general benefit to be derived from these branches, but whether there is sufficient transfer to benefit to other necessary types of ability to warrant the time given to languages and mathematics in the education of the average boy. This is an issue which many American colleges and preparatory schools apparently consider has been settled once for all in favour of the traditional procedure, but in which the experimental evidence is on the other side.

The question is often obscured by the effects of native ability and of selection. The fact that a boy who stood high in Greek in school now stands high in all hues in college, does not of itself prove that Greek is a better mental discipline than other studies. It may indicate rather one of two things: first, that the boy had greater native ability in academic lines and would stand high in college whether he had studied Greek or not; and second, that since Greek has a reputation for being a difficult subject, only those boys who indicate a fair amount of native ability ever venture to take it up. No one should pretend to have measured the value of Greek for mental discipline who had not carefully eliminated these two factors.

Many investigations have been conducted on the subject of transfer of training under

tance in determining its disciplinary value, because this so largely determines the range of its application to other subjects. The contention of some that formal studies have a positive advantage because they illustrate essentials of method in the broadest and most abstract form, is met by the consideration that the more remote subject matter is from life needs the less likely is transfer, and the more care is necessary in securing effective applications. The elements of method that are most applicable for wide uses are apt to be appreciated better in a more concrete kind of approach.

When it comes to teaching methods, Judd is most emphatic in stating that "application is a difficult mental process, and has to be learned just as the original principle has to be learned;" in other words, transfer is not automatic even when materials and methods are perfectly adapted for transfer. "Any subject becomes formal when it is organized so that it rotates around its own centre," or merely for its own sake. The generalization of any study and extension of its possible applications is the highest aim in instruction, and this attitude must be cultivated by practice in various directions. All this is most sound.

The subjects of our curriculum should therefore be selected on the basis of their content, and taught so as to illustrate generalizations and methods most needed in life. Thorndike suggests that to determine the disciplinary value of any study we should note the particular connections involved in it, especially the occasions of satisfaction, annoyance, and neglect; its tendency to create vital maxims, ideas of method and ideals, and attitudes towards the common situations of life; with constant attempts to verify our conjectures. While comparatively little has as yet been worked out that is above challenge, this view point is surely the one that

will lead to the best results. For those who are to use mathematical or linguistic methods, mathematics and languages should be freely provided. Those whose reasoning and observation will probably find their principal employment in other fields, had better have their principal training in these other fields in the first place, with no more of mathematics and languages than gives promise of maximum transfer. The social sciences seem destined to occupy a much larger space in our curriculum on account of their close application to the most important needs of society. Hitherto they have been held back because text-books and methods of teaching were in such a primitive stage, whereas the market is flooded with text-books of the older formal branches and with teachers who will teach them for small salaries because they can do nothing else. The social sciences, by their very nature, illustrate and demand transfer of learning to social needs. They should be used as introductory and correlating subjects to leaven the whole curriculum with the right attitude, and should be accompanied by practice in social service. Language study for the sake of ideas and ideals rather than for mere form, has most important possibilities of transfer, as have also the sciences, history and psychology, when taught in the right way. When the newer studies have received the attention that has been bestowed on the traditional subjects and have developed an adequate technique, it seems fair to assume that they will yield far greater results. Inadequately taught, they will surely be disappointments.

The main difficulty in securing the right kind of teaching is that most teachers are specialists with few interests outside of their

subjects and quite willing to teach them rotating around their own centres. The curriculum is manifestly a compromise between scholars who have not risen above group morality and who think more of their own subjects than of the broad needs of students. They are pressed for time and feel that to present applications as well as principles will prevent them from covering sufficient ground. Such work seems less intellectual, and moreover demands an ingenuity that they do not possess. But all testimony agrees that the largest possibilities of transfer will not be realized unless teachers adjust their methods to this end. It is suggested that transfer should be partially made in school, that enough should be done to indicate methods of application, with something left for students to work out for themselves. Concepts of method and ideals need to be constantly applied if they are to attain their best growth. The teacher who professes to value them most should be foremost in demonstrating the range of their bearing in every field. In every way resourcefulness in dealing with new situations should be encouraged. Students must be impressed with the fact that the methods which they learn constitute a rich stock in trade for dealing with life problems, and should receive frequent demonstrations of this. This may require some shifting of our schedules. Judd remarks that algebra is usually taught at a time when examples from the sciences cannot readily be borrowed, and suggests that it might be well to develop some simple notions of mechanics first, so as to give algebraic methods a demonstrable use. It is wasteful to accumulate methods before we can present situations which they can function.

X XIII

It is also undesirable to insist on an artificial routine that must always be followed; because the procedure lacks reality and may fail altogether to transfer when a few of the conditions are altered. The strictest drill within the class-room is sometimes the most ineffective outside. Detailed habits may need to be formed, but they should be regarded as tools with many uses and should be handled with freedom.

None of this implies superficiality. To be successfully applied a study must be thoroughly taught, but taught with applications in view. It is true that certain values of attention, attitudes, neglect of distractions, etc., may be best realized from studies that demand severe concentration, but this is no argument for studies that have only difficulty to commend them, or for loading a study with difficult but useless details, making it hard arbitrarily. The best discipline is achieved by overcoming difficulties with an intelligent and worthy motive. It is far better to demand effort for results that manifestly justify it than for tasks to which the student can see no outcome. In the latter case the transfer that takes place is more likely to be that of abandonment of the study as soon as the pressure is removed. Those who profit most from Latin are usually those who enjoy it most. Interest in any subject is apt to promote its transfer. Ideals are much more likely to be generated by occupations that appeal to us than by those which are pure drudgery. Some drudgery may be necessary, but it should always have an obvious motive and outcome.

The application of these principles will itself involve some difficult problems of transfer. We wish our students to be prepared for co-operative effort in society. We must exercise them in many forms of co-operative

effort in the school. We wish them not merely to accept their environment, but to react on it helpfully. We must create an attitude of initiative in improving surroundings in every department of school life. We wish them to continue to grow intellectually and morally when they are no longer under our supervision. We must train them with this special aim in view. We must constantly study their future surroundings in order to make the most of their possibilities, constantly follow up our students to discover how our instruction is transferring to life, and constantly experiment in order to secure from it the highest possible rate of interest.

The following references will be found useful for those wishing to study this subject:—

Thorndike:—The Psychology of Learning, 1913. pp. 350—433.

Thorndike has represented the more radical views on this subject, but this more recent statement is well balanced. The experimental evidence is reviewed and general laws laid down.

Rugg:—Experimental Determination of Mental Discipline in School Studies, 1916.

The main facts as to previous experiment are listed in a series of charts, and an investigation by the author is described in detail.

Lyons:—Pedagogical Seminary. September, 1914.

A discussion of the principles involved in transfer, with some excellent suggestions for methods of teaching.

Sleight:—Educational Values and Methods, 1915.

A criticism of previous experiments, description of personal investigations, with

application to teaching methods, and a discussion of general educational principles.

Judd:—The Psychology of High School Subjects, 1915.

Some good suggestions on teaching various subjects, presented in rather scattered form. Chapter XVII on Formal Discipline, emphasises training in application, but ignores the importance of content.

Coover:—Formal Discipline from the Standpoint of Experimental Psychology, 1916.

A rather technical discussion of extensive experiments conducted by the author. There seems to be a tendency to over-rate evidence indicating transfer, and to discount evidence to the contrary.

Heck:—Formal Discipline and Educational Values. Second edition, 1911.

A general treatment from the more radical standpoint.

Many articles describing experiments have also appeared in the Journal of Educational Psychology and other journals.

(Sd.) T. H. P. SAILER.

CLOUD MESSENGER.

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THE TANJORE DISTRICT TEACHERS' GUILD MEETING AT NEGAPATAM.

THE third meeting of the Guild for the year 1916-17 was held at Negapatam on Saturday, the 17th ultimo, in the National High School buildings. The attendance was fairly large. Besides the local teachers, about forty had come from outside representing various centres in the District, such as, Trivallur, Kumbakonam, Mayavaram, Mannargudi, Tirukattuppalli, Thethiyur and Poraiyar. The meeting began at 4 p.m. with Rao Bahadur S. Appu Sastrigal in the chair. Mr. R. Srinivasa Iyengar, Headmaster, welcomed the guests in his own humorous way after which Mr. Seshadri Aiyangar, Secretary of the Local Teachers' Association, read an address of congratulation to Rao Bahadur K. Seshu Aiyar upon the most deserved honour conferred on him by the Government. Then the guests were taken in batches to where Rao Bahadur K. Seshu Iyer had exhibited his Magic Lantern apparatus which dispensed with the necessity of lime-light and produced a very clear picture with the help of sunlight. The room had been partially darkened, a few doors and windows having been kept open to admit of free ventilation and light. By means of two suitably-arranged mirrors, the sun's rays were let into the room through a slit in the door. The apparatus itself consists of a brass tube like that of a telescope into which are fitted a planoconvex condenser to receive the sun's rays and a double convex object glass to enlarge the picture. By means of a string connected with the mirror outside, the operator inside was able to adjust the light as he pleased. The picture that fell on the

white screen was clear and well-defined. Mr. Seshu Iyer explained his method and said that the lantern could be used during the working hours of a school on any clear day and thus made to be of great educative value and added that the whole apparatus did not cost him more than Rs. 40.

The teachers again assembled at the place of meeting and Mr. Seshu Iyer delivered a most interesting and instructive lecture upon "Some Kinds of Manual Training," of which the following is a condensed report:—

Till very recently our system of education was marked by the complete absence of any real attempt to train the hand and the eye. Efforts were made, no doubt, to effect some improvement by the introduction in the curriculum of "Nature Study" in the lower classes and Science in the higher forms and Drawing in all the classes. The instruction in Science has practically been of no benefit to the children or to the country. What is wanted more urgently is direct manual training. At present there is a false notion among the elderly people that all work with hand is degrading and teachers in India have failed to utilise the imitative faculty which is very strong in children. This faculty was seized in Europe by educationists and directed to educative handwork. It therefore behoves us, teachers, to observe the plays of children and direct them into useful channels of work.

Paper-folding may be done in the lowest classes but it is not capable of expansion unless combined with pasting. Cardboard modelling has immense potentialities in it and cutting patterns of natural objects in cardboard may be made a very interesting and useful occupation in all forms of Secondary

ary Schools, in which the pupils learn caution and care by avoiding the dangers incident in the use of the knife or the chisel. Coloured paper can be brought in to create an artistic taste in children. It may be within the observation of all that while a large amount of decorative work on public occasions is done only by pupils (and masters in all Elementary Schools and not by professional artists, in Secondary Schools there is either a lack of this kind of decoration by pupils or, professional men are called in. In Secondary Schools life is extremely dull, no scope being given to pupils to express themselves in ways other than words. The aim of manual training is not to make a carpenter or a smith of the pupil but to develop the powers of observation and imagination. Children have also a good deal of artistic talent latent in them which should not be allowed by a good educator to run to waste.

Mr. Seshu Aiyar exhibited a very large collection of paper and cardboard work done by the pupils of the Mayavaram School. They were mostly different varieties of square, rectangle and triangle, repeated with slight modification to produce imitations of articles of furniture, not only in form but in true proportion. It is easy enough to cut up different pieces of cardboard and paste them together but the problem becomes more complex when a whole article with all the minute details in it has to be made out of a single piece of cardboard cut in suitable places and folded and jointed. This kind of manual work exercises in a most wonderful way the powers of observation and imagination in children and calls into play the activity of the various sense organs. Soon the children are not

content with the few forms they are asked to do, but they take the initiative and set their inventiveness to work to create new combinations of the original forms.

Our whole educational system is corrupted by insisting upon pupils expressing what they do in correct language. The child sees and does and expresses himself through the hand, though his tongue is still defective. The lecturer also showed some articles made of candle, paraffin, wax, chalk and soap-stone. He said that he chose this kind of manual work in preference to carpentry and smithy, for it required no expenditure. His tools were only a knife, a pair of scissors, a chisel made of an ordinary nail and knitting needles made of umbrella wires. The materials used were paper, covers of note-books, broken soap-stone vessels, cocoanut shells and country chalk. He concluded by saying that when our boys exhibited such talent and capacity for manual work the future was not without hope and if there was any despair it was only in our own timid hearts.

It was seven o'clock when the meeting broke up. The Guild met again at 7-30 A.M. on the following day when Mr. K. S. Narayanaswami Iyer of Kumbakonam opened a discussion on "Vernaculars as the Media of Instruction in Secondary Schools." In the course of the speech he said that in all countries the mother-tongue is naturally the medium of instruction and that in India where unnaturally the foreign English is the medium, the percentage of failures is the highest. The wastage in India is pitiable and various causes contribute to it, such as the multiplicity of subjects, the long and difficult curriculum, innumerable examinations conducted mostly by outside

examiners demanding a high minimum. To add to these, the pupils have to learn through English and have to answer in English. The considerable strain on the students' mentality can be released only by imparting instruction in non-language subjects through the medium of the pupils' vernacular. The speaker next took up the various objections raised against the proposed form and met them one by one.

(1) The cry that English will suffer is untenable, for by teaching the non-language subjects in the vernacular a portion of the time now devoted to them may be taken away from them and devoted to the study of English and consequently the pupils' mastery of English must improve rather than suffer. (2) The arguments that there are no suitable text-books cannot stand the test. The publishing firms will not be slow to take up the work and the market will on the other hand be overstocked with books on Science, History and Economics written in the vernacular. The dearth of books in the vernacular is due to the fact that the vernacular is not encouraged by the Government. (3) There is a hazy notion even amongst the educated Indians that English alone can unify India. The unification can be achieved only by the educated men of all provinces meeting on a common platform. The unifying influence of English is not taken away by making the vernaculars the medium of instruction in schools. On the other hand the masses by imbibing the western ideas, will be able to understand and appreciate the aspirations of the educated, and the vast gulf that separates the educated and the uneducated will be bridged up. (4) Lastly the attitude of the Director of Public Instruction is very much to be deplored. His condemnation of the cry

for the vernaculars as tall-talk was based upon the most erroneous inference that the demand for secondary education and the consequent overcrowding in schools means a want of demand for vernacular education. If a large number of vernacular schools existed in the land and if the instruction in them was as efficient as in English schools they would be equally popular.

The subject was thrown open for discussion. Mr. R. Srinivasa Iyengar made a reference to his own experience in actual class teaching and said that he had no faith in education through the medium of English. Mr. Seshu Iyer said that there was a combination of evil forces working against this reform. He was of opinion that the Guild should undertake the task of preparing suitable text-books in the vernaculars. Mr. V. Guruswami Sastri mentioned that in the Tirukattupalli High School, Indian History was taught only in Tamil in Form IV and that the pupils answered the papers in Tamil and that the reform would be extended to the V Form next year.

The Chairman in his closing remarks said that he fully endorsed the remarks of the speakers. In regard to Mr. Stone he said that Madras could not have had a more sympathetic Director, and that it was our misfortune that he should have made the astounding remark which he did make at Delhi.

Finally the following resolutions were proposed and passed unanimously :—

(a) That, in the opinion of this Guild, it is not merely desirable, but in the highest interests of the country essential, that the teaching as well as examination, both school

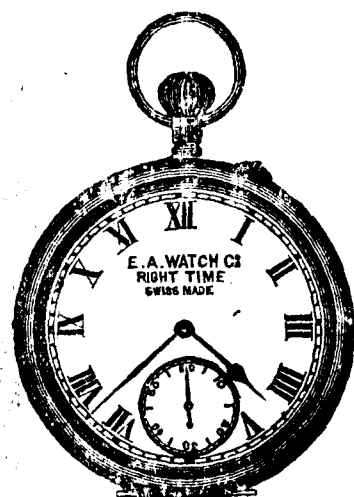
as well as public in all subjects other than English and in all forms of Secondary Schools should be in the vernacular.

(b) That with a view to secure this end the Government should permit such teaching and examination to be conducted in the vernacular.

(c) That this Guild is ready to prepare and publish such books as may be necessary for the purpose.

The session came to a close at 10-30 A.M. The staff of the National High School deserve the warmest thanks of the Guild for the splendid hospitality which they extended to the guests in spite of the considerable strain put upon them by the unprecedented second session.

The annual meeting of the Guild will be held at Tiruvalur about the middle of April.



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AN ENGLISH PRONOUNCING DICTIONARY, BY DANIEL JONES, M. A. (PUBLISHED BY J. M. DENT AND SONS, LONDON AND TORONTO). Price 6s. net.

This Dictionary supplies the long-felt need which has risen with the increase in the number of teachers using the phonetic method in the teaching of English; and we think that it is difficult to overestimate its merits. The object of the book is to record with as much accuracy as is possible the pronunciation of the Southern-English people; and the phonetic alphabet used is that of the *International Phonetic Association*. The book does not pretend to be complete, nor does it dogmatically lay down how people ought to pronounce English. It is a highly stimulating book useful to all English-speaking people.

To us, Indians, it is of special value. We are confronted here in India with such a variety of pronunciations—Scotch, Northern-English, Southern-English, Irish and American—that we are at sea as to what pronunciation we must adopt. We naturally require some book that will give us a correct and careful record of some form of English pronunciation which is not only easily understood by Britishers in general, but considered an unobjectionable form of speech. This desideratum is supplied by this pronouncing Dictionary.

A special feature of the Dictionary is the inclusion of Proper Names. But here we find many Indian names in pronouncing which we should not like to be guided by Mr. Daniel Jones. For instance, we like to pronounce 'Maharajah' not as *ma:he'ra: ʃʒe* but as *mæha': ra: dʒe*; 'malayalam' as *mæleja': lem* and not as *mæli'a: lem* and so on.

A FIRST COURSE OF ENGLISH PHONETICS, BY H. E. PALMER. (PUBLISHED BY W. HEFFER AND SONS, CAMBRIDGE). Price 2s. 6d. net.

This little book is admirably fitted for an effective teaching of Phonetics in the lower classes of Indian Secondary Schools. It contains an explanation of the scope of the sciences of phonetics, the theory of sounds, a catalogue of English sounds and a number of articulation, pronunciation and transcription exercises. The method followed throughout the book is the most natural and logical; and the charts used to illustrate the

formation and classification of English sounds are drawn with great clearness and accuracy.

The characteristic feature of this book that is sure to be of great use to all Indian teachers of phonetics is the list of English words likely to be confused by foreign students on account of their similarity. We are sure that this should be a useful book in the hands of a capable teacher who uses the phonetic method in the teaching of the English language.

'WHY BRITAIN WENT TO WAR,' BY SIR EDWARD PARROT (NELSON AND SONS). 1s. 6d.

This is an attractive little volume of 224 pages, proceeding from a well-known author of children's books. Written in a bright and racy style, the book teems with fine descriptions of men and scenes. Although mainly intended for English boys, Indian boys too must find the book interesting and useful.

The first two chapters, entitled "A Bolt from the Blue" and "The Setting Whirlpool" give a vivid account of the course of events immediately preceding the war. Then follows an account of the history of Prussia from the very beginning and this forms the main and the most valuable portion of the book. The history is narrated in about 9 chapters and the rise and growth of Prussian militarism under successive kings and statesmen are clearly brought out. The artful diplomacy of Bismark, his policy of blood and iron, and the Franco-Prussian war of 1870 come in for a detailed treatment. By means of this historical sketch readers are prepared to understand the real origin of the Armageddon. This is followed by a very interesting sketch of the boyhood of the Kaiser, his training and education, his ideas and ideals, his growing faith in Germany's grand mission, Bismark's influence over him, his notion of divine right, his great attention to the army and the navy, etc. In the chapter headed "The Dawn of the Day" Germany's foreign relations and her preparations for the war during recent years, are succinctly dealt with. The last two chapters deal with the entry of one European power after another into the arena of the war, the failure of England's noble efforts for peace and her final declaration of war. Summaries are given of the thrilling speeches made by Viscount Grey and Asquith in the memorable Parliament of the 3rd August 1915.

Numerous illustrations and maps have been inserted which must add immensely to the value of the book.

THE STUDY OF ANIMAL LIFE, BY DR. J. A. THOMSON,
M.A., LL.D. (JOHN MURRAY, LONDON.) 6s. net.

We heartily congratulate the author on this excellent book of his which contains a good deal of information for its size, and is written in easy style.

We are, however, constrained to remark that the inclusion of Enteropneusta and Tunicata under the Vertebrates is not likely to meet with universal acceptance. Most modern authorities give these a place just below the vertebrates. By virtue of the presence of the notochord, these, together with the vertebrates are generally included in the big phylum *chordata*. Again, on p. 243, the author remarks thus, 'we place Echinoderms after and not before worms because the simplest worm-like animals are much nearer the hypothetical gastrula-like ancestors than are any Echinoderms, and also there is some reason to believe that Echinoderms originated from some worm type or other.' The tree on p. 11 would have better borne out this statement if the word 'worms' were printed below and not above the Echinoderm branch.

Several of the illustrations have voluminous descriptions in small letter press. In some where constant references to the figure are made there might be some justification for this (e.g. Fig. 43 brain of a pigeon, Fig. 54 cell-division, Fig. 58 the skull of a lion, &c.). But in others the descriptions might well have been incorporated in the body of the book to ensure greater continuity of subject matter (e.g. Figs. 7, 10, 20, 37, 44, 64, 69, &c.). We should also have liked to see Figs. 27 (Bird of Paradise, 31 Male Argus pheasant, 91 three differently coloured types of the wall lizard and a few others), printed in colours and not merely in black and white.

The above points however, do not in any way detract from the merits of the work. We particularly commend the following features: (i) tabular summaries here and there (pp. 191 differences between plants and animals, 296, chief classes of mammals, 297 survey of the animal kingdom, 350 Geological distribution of animals, 377 Diagrams to illustrate Mendelism. (ii) The life histories of animals are also illustrated beautifully (e.g. 67 Liver fluke, 109 butterfly, 110 *Toenia solium*, 111 common shore crab.) The most commendable features of all are (iii) the plan of treatment and (iv) the flowing style. The author divides the subject under four heads which, as he says, broadly correspond to Physiology, Morphology, Embryology and Aetiology, thus ministering to the varied tastes of readers. The style is simply charming. The

occasional poetic extracts show that the author realises, and wants his readers to realise, the beautiful in nature. He is therefore unlike most of our scientific puritans who have no eye except to minutiae and whose writings do not in the least breathe any aesthetic appreciation of nature.

CHATTERTON AND HIS POETRY BY, J. H. INGRAM.
(G. G. HARRAP & Co.) 1s. net.

We have nothing but the highest praise for the general plan of the series in which the present volume has been published. The purpose of the series is nothing less than that of offering the exposition of a poet's work in intimate relation to his life, besides the more apparent task of interpreting his poetic art in all its essential aspects. But such a scheme, one would think, was worth bestowing only upon the greatest masters of poetry. The choice of "Chatterton" does not seem appropriate. He is but a fleeting vision and "a marvellous boy" and his work is immature and fragmentary. But a collection of Chatterton's "curiosities" is valuable. The best work in the direction has however been achieved by Dr. Skeat. The present work does not succeed in presenting to the reader in any scientific manner the facts relating to the authenticity of the Rowley literature. A good deal of pointless and meaningless criticism is betrayed in many pages and even viewed merely as composition the book abounds in many imperfect sentences.

"The lad had to have his meals and live at Lambert's house..." (p. 30).

"He had to be at the house for dinner and return to the office until eight in the evening, when he was free until ten."

"...at whose vicarage...he visited for a time."

After all has been said, if we acquit Mr. Ingram of being an able exponent of Chatterton, the present volume will prove of great value to the student of literature as collecting in a handy compass the precious curiosities connected with the ever-romantic name of Chatterton.

THE INDIAN LIBRARY OF ENGLISH POETS, EDITED
BY S. G. DUNN, M.A.—WORDSWORTH AND
COLERIDGE. (HUMPHREY MILFORD). Rs. 1
each.

The selections from the work of the two English romantic poets that lie before us are intended specially for Indian boys. This shows

that English Literature has come to stay in India—and that English poets occupy a considerable importance in the education of our youths. A selection from Wordsworth is always justifiable. It has been recognised that the bulk of his poetry shows very unequal merit. Matthew Arnold has said it in his own forcible manner. Mr. Dunn has taken on himself, as he says in the Preface, "to clear away the rubbish" and offer to the reader choice selections from the poets. We think that Mr. Dunn has succeeded in his task.

Coleridge's good work is not of much bulk and a selection is easily made. His important place in the Romantic Revival and the weird charm of his own work fully justify a volume of Coleridge for the young.

In reviewing these fresh editions of the poetry of a century ago, one is inclined to compare its quality with that of the output that has been, since that time. Has not modern literature tended to recede more and more from the vital reality of life? Has it not tended to become something aloof from the life of humanity, a highly developed and artistic product but not touching the heart of the average man? Are we not to ask with Matthew Arnold:

Time may restore us in his course,
Goethe's sage mind and Byron's force;
But where will Europe's latter hour
Again find Wordsworth's healing power?

THE RIPON READERS: PRELIMINARY, JUNIOR AND
SENIOR. (PUBLISHED BY THE MODERN PRINTING
WORKS, MOUNT ROAD, MADRAS). 12 as., 1 Re. &
Rs. 1-4 as. respectively.

We welcome this publication by an Indian firm of Printers and Publishers. The selections are edited and arranged by an Indian Educationist of 'vast experience.' Needless it is to point out that they are good, coming as they do under such auspices. They extend over the whole range of modern English Literature, varied in character and interest, short, bright, and instructive. Some pieces give information on such curious points as the motto, *Ich Dien*, of the Prince of Wales, of which many are ignorant. The prose selections do not err, as 'English' Readers do, in imposing on us the tyranny of their taste, over which many an Indian teacher and pupil simply yawns. These also serve the real purpose of introducing our boys to English literature without effort.

XXIII

Regarding selections in poetry, we have no hesitation in saying that they are decidedly good. They are well graduated and arranged on a sound principle. Take such a piece as *The Elephant*; we have, first, the impression it made on the old Roman, when he first set his eyes on it; then, a poetic description of it bringing out its several good and bad points; lastly, a very familiar story of the blind men and the huge creature, poetically rendered. These three appear severally in the Preliminary, Junior and Senior Readers. It may be noted that some *copyright* poems are also included. Besides, these Readers have separate selections in Prose and Poetry for Recitation, which, we dare say, enhance their educational value. Another special feature of this publication is that brief references and notes are also appended at the end of each volume, lightening the work of the teacher considerably.

Their *get-up*, which is, generally speaking, such a sorry affair with Indian publications, vies with the best English publications of the kind. We congratulate the Publishers for their enterprise, though at the same time we should like to offer some suggestions regarding introduction of more narratives in their prose selections, and, if possible, some illustrations to brighten up the books a little bit more. We earnestly wish that Indian enterprise like the one under notice would be encouraged heartily by all well-wishers of our country.

PUBLICATIONS RECEIVED.

How We Learn, by W. H. S. Jones, M.A. Cambridge University Press. 1s. 6d.

Elementary Dynamics of the Particle and Rigid Body, by R. J. A. Barnard, M.A. London: Macmillan. 6s.

Njab and Gunnar, retold by H. Malim, M.A. London: Macmillan. 1s.

Selections from *Le Morte D'Arthur* of Sir Thomas Malory, edited by Dorothy M. Macardle, B.A. London: Macmillan. 2s.

Jātaka Tales, by H. T. Francis, M.A. and E. J. Thomas, M.A. Cambridge University Press. 7s. 6d. net.

An English Pronouncing Dictionary on strictly Phonetic Principles, by Daniel Jones, M.A. London: Dent. 6s. net.

The Study of Animal Life, by J. Arthur Thomson, M.A., LL.D. London: Murray. 6s. net.

The School Garden, in Kannada, by M. Ramabrahma, B.A., B.T., Dharwar.

The Ripon Readers. Preliminary 12 as. Junior Re. 1, Senior Re. 1-4-0. Madras: Modern Printing Works.

Brave Deeds done in the Great War, by A. C. Clayton. Madras: C. L. S. 3 as.

The Supreme Person and the Supreme Quest, in Telugu. Madras: C. L. S. 1½ as.

Reasons Why I Became a Christian, by A. S. Appasami Pillai, in Tamil. Madras: C. L. S. 1 a.

God's Plan of Soul-Winning, by Thomas Hogben, in Telugu. Madras: C. L. S. 3 as.

The History of India for Junior Students. London: Longmans.

Subhodha Rama Charitham, by Sister V. Balammal, Triplicane. 6 as.

Government of the United Kingdom, by A. E. Hogan, LL.D., B.A. London: Clive. 2s. 6d.

Some American Opinions on the Indian Empire. London: Unwin. 2d.

Indian Educational Notes.

MADRAS.

Municipal High School, Walajanager.—Mr. M. Ramaswamy Aiyangar, B.A., L.T., Inspector of Schools, Fifth Circle, visited the school and inspected the work of the teachers and the pupils on the 19th, 20th and 21st instant. He also attended the Foot-Ball match on the last day.

Advantage was taken of his arrival here and the Anniversary of the M. H. School Teachers' Association was duly celebrated on the 24th instant when the Inspector of Schools presided.

The proceedings began with a short but lucid speech by the Chairman who emphasised on Education and Sanitation as being the most essential factors in the progress of any nation, and said that we are in the midst of great changes both in Education and Sanitation which augur India's prosperity.

This was followed by a few comic recitations, such as "The Old Mother Hubbard," "The Young Philosopher and the Rival Snopkeepers, &c.," which were enacted with great histrionic skill and cleverness by the actors concerned.

Next followed the reading of the Annual Report by the Secretary of the Association. The report showed among many things the great activity which the members of the Association had in the regular sittings and the reading of papers—the subjects of which were very varied and instructive. This was followed by a short paper on "the Monitorial System" by Mr. V. Srinivasa Rao, a member of the Association. The lecturer said that barring

the fagging system, the system could be safely tried in our schools so as to produce the best results.

Then the President of the meeting rose amidst cheers and remarked that the several reciters did their part very well and that the Young Philosopher should always remind us whenever we go astray by selfishness. He was glad to find the great enthusiasm and thought bestowed on the paper read. Coming to the report, he eulogised the Association on its activity and said that the subjects at the several meetings were all well chosen. He admitted that the teachers' profession was the noblest of professions so long as the teacher kept an untainted personality. Wishing a prosperous career for the Association and the school he resumed his seat when the Headmaster of the school and the President of the Association paid a high tribute to the Chairman of the meeting as well as to the Chairman of the Municipality for their great sympathy in behalf of the school and garlanded them. After the singing of the National Anthem, the proceedings of the evening came to a close with the distribution of *pan supari* and flower balls.

Municipal Conference: Education and Local Bodies.—The first Madras Local and Municipal Conference was held on the 17th instant in the Victoria Public Hall. About 125 non-official members of Municipal Councils, District Boards and Taluk Boards from all parts of the Presidency attended. His Excellency Lord Pentland opened the Conference.

Rao Bahadur K. Seshu Iyer, Headmaster, Municipal High School, Mayavaram, contributed a paper on the "Organisation of education under local bodies." He suggests that a special board with powers to organise branch boards all over rural areas should be constituted with specific financial resources allotted both from Local and Provincial Fund, to look after the educational needs of the locality. The advantages claimed for the proposal are (1) that it will lead to the evolution of greater personal interest in educational matters and pave the way for universal and free compulsory education, (2) that due account will be taken of the differences in the rate of progress of different areas, (3) that instead of the one unvarying type, that is now in force, it would facilitate the introduction of a variety of syllabuses and courses of study to suit particular people or localities, (4) that the new organisation will attract a large number of private and public charities which are not tapped by the officialised nature of the system which has little personal connection with people, (5) that it will lead to a closer touch between the various classes of institutions managed by the local bodies, and (6) that it can be of great use in training more teachers for Elementary schools than could be got under the agency of a centralised department. Another reason in favour of creating a separate organization like the one proposed is that the existing inspecting agency is both unsuitable and in-

adequate to meet all the needs in respect of offering expert advice in educational matters and guaranteeing proper application of Government funds and that in view of the diversity of conditions and needs of the localities, there is need for an indigenous agency in touch and sympathy with the people and their needs while the Government inspecting agency should be strictly confined to the function of seeing that the funds are properly spent.

The Hon'ble Rao Bahadur M. Ramachandra Rao, in his paper on "Educational Organization of Local Boards and Municipalities" puts forward a number of suggestions to improve the unsatisfactory position of local bodies from the point of view of the expansion of education. The most important of these are the following:—

(1) Steps should be taken for the constitution of Education Committees or Boards in selected areas at first to be co-opted with the Local Boards and Municipal Councils.

(2) The Education Committees must have separate resources set apart for educational expenditure. If an education cess is to be imposed it can only be on the guarantee that the Government will contribute the larger part of expenditure on elementary education. Elementary education must be considered a national service and not a local service.

(3) The local bodies must have the lower inspecting agency directly under its control. The higher agency may be under the Government. The provincialization of Supervisors while it has improved the position of the class of officers has resulted in depriving local bodies of their own inspecting officers and of all means of efficient control. The service may continue to remain a provincial service but the officers should work directly under the local bodies subject to their disciplinary control.

(4) Local control of village schools should be developed by the formation of Village Committees or Panchayats.

(5) The needs of each district from the point of view of secondary education should be examined and Local Boards and Municipalities should be used as agencies for starting new schools. The district should be regarded as a unit for secondary and elementary education and the needs of secondary and elementary education should be systematically examined and periodically co-ordinated.

(6) Attempts should be made to utilize Local Boards in the sphere of agricultural instruction and agricultural experiments. Most of the members of the rural boards are engaged in agricultural pursuits and have a great deal of interest in agricultural and veterinary matters.

Mr. Panchapakesa Iyer, Headmaster, Board High School, in his paper on "Education and Local Bodies" suggests that the School Boards or Educational Committees should consist of educationists and others interested in the education of local areas and deal with all educational questions, establishment of new schools and improvement of existing schools.

As regards the Inspecting agency, he desires that local bodies should have their own agency and the duties of the departmental Inspectors being restricted to the general control and supervision over private institutions.

Mr. T. V. Srinivasa Iyer, Headmaster, Board High School, Amalapuram, in his paper on the same subject, suggests that a fixed per cent. of income for in excess of the present allotment should be given for education. He thinks that the District Boards should have direct charge of secondary education and Taluk Boards of the primary. He also suggests that in each district and taluk board a sub-committee should be formed for the consideration of educational questions. He would have that headmasters of secondary schools of long experience should be invited at their discussions though they may not be members.

Vaniyambadi Usmania College.—At the instance of seven Mussalman citizens of the town, a meeting was held on the 9th instant at the Taj Club in Fort, Vaniyambadi. Khan Bahadur T. Aminuddin Sahib presided. The proceedings were conducted in Urdu. The following resolutions were passed.

"That the Mussalmans of Vaniyambadi, in public meeting assembled, beg most respectfully to convey their heartfelt gratitude to His Highness the Nizam for the princely grant that he has made towards supplying a long-felt educational want of the community. This meeting welcomes and values these royal gifts as remarkable tokens of His Highness's kind recognition of the humble services which Vaniyambadi Mussalmans have tried to render during the past 15 years in the field of Mussalman education. This meeting deems it a further kindness that His Highness has been pleased, to permit his august name to be associated with the proposed institution and feels sure that the Usmania College at Vaniyambadi will remain for ever a living monument of His Highness's generosity and of his deep practical interests in the welfare and progress of the Mussalmans of Southern India.

That this meeting dissociates itself from the resolutions bearing on the College question passed at its meeting held on the 28th January, 1917, by the Executive Committee of the Vaniyambadi Mohamadan Educational Society."

"That this meeting agrees that the management of the Vaniyambadi Usmania College should be in the hands of a Committee specially qualified to manage a Collegiate institution and approves of the Board of Management which the Government of His Highness the Nizam have appointed at the suggestion of the Madras Government. This meeting recommends such gentlemen may also be taken on the said Board as are deserving the honour, and are willing to work towards insuring its success."

It was also resolved to raise subscriptions for the Usmania College, and for this purpose a Committee was appointed, with Khan Bahadur Mittadar T. Aminuddin Sahib as President, and Malayalam

The Educational Review.

We congratulate the Hon. Mr. B. N. Sarma on his having drawn the attention of the Imperial Council to

Boy Scouts.

the need for the organisation of the Boy Scout Movement among Indian boys at school and college. It was no exaggerated picture of the advantages of the Boy Scout Movement that the Honourable member drew, and we have often referred to the valuable qualities of manliness, courage and readiness of resource that are developed by the institution. Now that the provision in the India Defence Force Act for the formation of Cadet corps does not apply to Indian lads between the ages of sixteen and eighteen, the only opportunity for affording some sort of military training to our youths is through the Boy Scout Movement and we trust the Government will enter upon an active campaign for its extended organisation in Indian educational institutions. The resolution, it is some satisfaction to note, was accepted on behalf of Government by the Hon. Sir Sankaran Nair, and we hope that immediate practical action will follow. We have also to note in this connection that nothing further has been heard of the attempts at starting the Boy Scout Movement in Madras, made sometime back by H. E. the Governor of Madras, and we hope His Excellency will not fail to inaugurate it before his departure.

The long-expected Senate meeting of the Madras University which was to shed the benefit of its wisdom as

The Madras Senate Meeting.

well as exercise the might of its authority over the question of failures at the Intermediate Examination, did come, though we are afraid the fact would not be patent by the work that it has been able to leave behind. The Committee appointed to consider the matter had drawn up a report, which extended over several sheets of fine paper, (at a time when stationery was very costly!) and at a very hasty session of the Senate, marked by considerable impatience on the part of some of the members who constituted it, meagre justice was done to it. It was resolved that the Board of Studies in English should be asked to 'revise' its course of studies for the Intermediate Examination, though in the absence of any specific direction in which it ought to be done, we are afraid the recommendation cannot be of any very great service, and it is difficult to pronounce any judgment without seeing to what consequences the recommendation will lead. It was proposed that eligibility for admission into the College department must depend upon the getting of a definite percentage of marks in the School Final Examination, and independently of the advisability of adopting the recommendation. We must regret the decision of the Senate to pass on to "the next item on the agenda." A question of such moment as that surely deserved better treatment at the hands of the dignitaries of the Senate, and a definite pronouncement on the matter would seem to have been absolutely necessary in the circumstances. Some satisfactory work was however

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done in connection with the definition of the duties of University Professors, and the vexed question of University Readers in Comparative Philology was also settled, though only by the expedient of putting an end to their offices. The latter are responsible for the expenditure of much ink and paper over them, not to speak of the valuable breath and energy spent up in the controversy, and it must be a great relief to every body concerned that the subject has been buried, like Prospero's magic wand,

Deeper than e'er plummet sounded.

It was impossible that the Local Self-Government Conference, which recently assembled in the city of Madras,

Education and Local Bodies.

could have failed to discuss the question of Education in relation to Municipalities and District Boards, and we are glad to note the subject received some attention. Besides the reading of some papers on educational subjects, the Conference discussed the question of levying an educational cess by local bodies, and also passed some resolutions of importance. We confess we cannot extend our sympathies to those who argued against the levy of an educational cess, on the ground that it was the duty of the Government to provide educational facilities for the children of the country. It is not our intention to absolve Government of their grave responsibilities in the matter, but we must gently remind the good critics that the resources of a Government are not endless, and there

is no perennial source from which Government can draw upon to any extent, even for such a laudable object as the spreading of education in the country. It is also good to remember that Government money comes only from the people and there is no use local bodies trying to shift the burden on to other shoulders, without however relaxing any of their zeal for wider privileges and anxiety for the exercise of control over education. We would even go a step further and say that no control over educational matters should be allowed to any body of people, who are not prepared to take a good share of the financial responsibilities involved. Local bodies always extending the beggar's bowl to Government, and desiring credit for their management of educational institutions are pathetic sights unworthy of any complacent reflection. Our knowledge of the general mismanagement of educational institutions by such miscellaneous bodies as Municipalities, makes us eager to support the suggestion that there should be special educational committees, or boards, provided some guarantee is furnished of their being constituted of persons with at least some show of qualifications for the management of schools. While we approve of the recommendation of the Conference that the subordinate educational inspecting agency of local bodies may be organised as a provincial service, to allow of graded salaries and free flow of efficient men from one local body to another, we are not sure if it is wise to place its members at the entire mercy of

the local bodies, except in such large Corporations as the Municipality of Madras. It might lead to a perceptible diminution of any sense of independence they may possess, and one might look in vain for the frank and upright criticism of the 'expert.' There is a fatal tendency on the part of local bodies to look upon education as a subject with which everybody can tinker, and education has already suffered in them, by not being placed on the independent basis on which, for instance, medical institutions in their charges have been placed. Though the medical agency is paid by local bodies, it is subject ultimately to the Surgeon-General and that has saved the medical officers concerned from a good deal of petty local tyranny and allowed them to pursue their work in fairly undisturbed peace. As education is not less important than sanitation and health, we wish to see the same conditions ensured in that department also.

The following is the text of the educational resolutions that were passed at the Conference:—

1. This Conference is of opinion (a) that sufficient provision be made in each district for elementary and secondary education and that the Local Bodies should be placed in a position to co-ordinate the needs of elementary and secondary education in each district;

(b) that Local Boards and Municipalities should be used as agencies for meeting the wants of secondary education, without in any way trenching on the present expenditure on elementary education;

(c) that village co-operation should be secured or the expansion of education by the constitution

of Village Committees to look after elementary schools.

2. This Conference urges (a) that legislation be introduced so as to empower local bodies to introduce, with the approval of the Government, free and compulsory education in selected areas;

(b) that the subordinate inspecting agency be placed directly under the local bodies, but that it should continue as a provincialized service.

We commend the plea for a National Art Museum put forward by Mr. Ganguli in the last number of the

A National Art Museum.

Modern Review. He suggests that an attempt should be made at the establishment of a National Art Museum, in connection with the Benares Hindu University and we hope the suggestion will not fall on deaf years and that it will be taken up in other parts of the country also in connection with similar institutions. It is a matter for profound regret that in the present circumstances of our country, the under-graduates of our Universities are denied all opportunities of æsthetic culture, except those that are furnished by poetry and literature. Even in the proposed University of Nagpur, which has been initiated entirely under official auspices, provision is made for an Art Museum, to contain specimens of Eastern and Western Art, and we hope the Benares Hindu University will not lag behind it. It is only necessary to add that æsthetic education has got an important bearing on character, and as Plato said, the mind passes from the contemplation of one beautiful object to several, and from beautiful objects to beautiful actions. We understand the

Benares Hindu University is making provision for a Museum and it must be easy to start a Fine Arts section in it.

The Calcutta University is continuing to be a centre of lively interest, and some recent happenings have added

The Calcutta University.

a new flavour, not very agreeable, to its life. There was a leakage of all the question papers of the University, at the current examinations, and the latter have had to be postponed by several weeks as a consequence. That is probably not a very strange experience in itself, as such lapses are bound to occur from time to time in all human institutions, and other Universities can bear witness to similar happenings. But what makes the situation more serious and somewhat disheartening is the revelation of an organised and widespread conspiracy to circulate all the papers to all the centres concerned, to be of service, in time, to all the examinees. The magnitude of the organisation, all in the interests of such an unworthy purpose, takes one's breath away, and is sure to cause distressing reflections, to which we had better not give explicit utterance. Coming to other serious matters however, we find that on the motion of the Hon. Sir Asutosh Mukherjee, who continues to take a vigilant interest in the affairs of the Calcutta University, in spite of his ceasing to be Vice-Chancellor, the Senate resolved to take immediate action on the report of the recent Committee appointed by the Imperial Government to consider the question of the post-graduate courses in

the University. The recommendation was that there should be intimate association and co-operation between the staff of the Colleges and that of the University in the interests of all concerned and it met with the ready acceptance of the Senate. So was it also with another recommendation of the Committee that it was necessary to constitute a suitable organisation within which Post-graduate teachers would be enabled by discussion among themselves efficiently to conduct examination and teaching of graduates. Meanwhile, the Imperial Government is pushing forward the arrangements in connection with the proposed Commission to investigate into the affairs of the University of Calcutta. Advantage was taken of the occasion of the Budget speech by H. E. the Viceroy to announce that Dr. Michael Sadler, the distinguished Vice-Chancellor of the University of Leeds, had agreed to come over to India to preside over the Commission. We have already had occasion to comment on the proposed Commission, but it is some consolation that the President will be a practical educationist of the capacity and eminence of Dr. Sadler. His intimate acquaintance with a modern University of the type of Leeds must stand him in good stead in the important work that lies before him.

We extend a cordial welcome to the new *Mysore University Magazine*, which has just begun to appear as the official organ of the Mysore University, under the editorship of

The Mysore University Magazine.

Mr. Thomas Denham, M.A., the Registrar of the Mysore University. The authorities of the University have very wisely resolved upon making the magazine appear only thrice a year for the present, a precaution against possible lowering of standards, whose value cannot be exaggerated. Judged by the contents and get-up of the first number, we have every reason to expect the magazine will be a success, especially with the low annual subscription of one rupee and eight annas, which it has been decided to charge. Mr. H. J. Bhaba, to whose energy and enthusiasm, as Inspector-General of Education of the State at one time, much of its educational progress to-day is due, writes an appreciative note on the Mysore University. His complaint is probably true that "there is already a tendency to interfere too much in details, which cannot but damp enthusiasm and lesser this sense of responsibility. * * * There is an appearance also in the internal administration of the University of an inordinate desire to appoint Committees and wait for their reports in matters which should be decided straight off."

The subject of compulsory Elementary Education in India has not been forgotten with the death of the late

Mr. Gokhale, and his successor as President of the Servants of India Society, the Hon. Mr. V. S. Srinivasa Sastri, brought the subject before a recent session of the Imperial Legislative Council. He referred to the definite

promises made by the Imperial Government on various occasions, to enter on a policy of continual expansion of elementary education, so as to reach the limits of Universal Free Elementary Education in the country within a number of years. He referred to the subject again at the Budget meeting. "War or peace, abundance or want," he said, "the Government must make a fresh recurring grant every year according to a settled programme to start fresh schools. Till such a programme was produced, it would be difficult for an impartial judge to acquit the Government of a mere Platonic adherence to the theory of Universal Elementary Education." It was probably not possible for the Hon. Sir William Meyer to make any reply other than what he actually made, in view of the keenly adverse conditions created by the war, but there was not much of sympathy, insight or statesmanship in the words used, which would seem to amount almost to a repudiation of Government's responsibility in the matter. The Hon'ble Finance Member is reported to have said: "The resolution asked the Government to take up a definite liability and it was impossible for them to accept any such mandate." An incidental note may also be made of the features of the part of the budget introduced by the Indian Member of Education. There was to be a recurring grant of Rupees thirty lakhs a year, in spite of the war, for the development of Primary and Secondary Education and he maintained it was not desirable to

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make any definite distribution between the two, in view of the independence of discretion that had been intended for Local Governments.

The unsettling conditions caused by the war, and the consequent tendency to recast the educational systems of countries to suit the direct needs of military and national organisation, are apt to make people lose sight of the aims of true culture. While granting the plea that it was necessary to bestow increased attention on commercial and scientific subjects, and while conceding also that a course of education in subjects like the classics and ancient history, was not suitable for every person that came to a University, not even to Oxford and Cambridge, he ventured to point the value of a training in what may be called the 'humanities.'

Describing the benefits we received from the study of the ancient world as it spoke to us through its great writers, he said that ancient classical literature was the common possession, and, with the exception of the Bible and a very few medieval writings, the only common possession, of all civilized peoples. Every well-educated man in every educated country was expected to have some knowledge of it, to have read the greatest books, to remember the leading characters, to have imbibed the fundamental ideas. It was the one ground on which they all met. It was therefore a living tie between the great modern nations. Ancient history was the key

to all history, not to political history only, but the record also of the changing thoughts and beliefs of races and peoples. In days of sadness, when strife, wantonly forced on those who sought it not, was destroying the flower of the youth of many nations and embittering the people, against one another, it was well to turn back to the pages of history which told how the ills our Europe bore had often been borne before, how often in that ancient world no less than in our own bright hopes were baulked and the crimes or follies of a few brought ruin on the many. And so we might seek for comfort not only in the poets, but also in the ancient sages, in the lofty thought of Plato and the wise counsels of his greatest disciple.

On the motion of the able and sympathetic Director of Public Instruction of the United Provinces, the Hon. Mr.

The Allahabad University.

C. F. de la Fosse, the University of Allahabad has taken a very important step, in providing better and larger accommodation in colleges for the housing of students. It will be obligatory on colleges in future, to see to the provision of proper hostel-accommodation, to all students except those who are living with their parents, near relations or recognised guardians. If a college is not in a position to take all of them into hostels attached to it, it must at least provide for approved private lodgings, open to inspection by the authorities of the college as well as of the University. The new regulations will thus ensure the

students' living in lodgings which will be satisfactory from the moral as well as the sanitary standpoint, and will mean the introduction of a ray of cheerfulness, even in institutions in which such facilities have not till now been attended to in any adequate manner. Even as a well-equipped staff, a satisfactory building and an efficient laboratory are looked upon as requisites necessary for affiliation by a University, we are of opinion that the provision of adequate hostel accommodation must also be insisted upon. We do not wonder that the Hon. Mr. C. F. de la Fosse said in the course of the speech moving the resolution, that when the time came for him to lay down the reins of office, he would look back upon his efforts to provide hostels for colleges in the United Provinces, with greater pride than on anything else he had done in the course of his long service in India. The Regulations concerning the subject will of course have to be enforced without causing hardships to individual colleges, or retarding in any measure, the progress of higher education in the country.

Considerable enthusiasm was displayed at the last meeting of the local Legislative Council, for the educational needs of the various localities represented by the members concerned. We have no doubt that demands for increased grants and for new educational institutions in certain areas will go a long way to ensure the support of the elec-

torates, when the time comes for the re-election of the members, but the decision of such matters must depend largely on a due examination of the needs of other localities, and we are not sure of the ultimate benefits for the educational progress of the Presidency, subserved by such resolutions. Such were the demands for Science classes in the Anantapur College—though in view of the special interest taken in the college by Government, the request was complied with, the grant of Rs. 60,000 wanted for the Municipal High School, Bellary; and the High School for Mohamedans at Nagore for which the Mohamedan representative of the place made a request, and we are not surprised that these efforts were not crowned with great success. The opening of Honours classes in the Kumbakonam College will no doubt be a great convenience, to a few parents in Kumbakonam who may now have to send their sons to Madras, but we are not sure if the Hon. Mr. V. K. Ramanujachariar was justified in recommending the expenditure of a lakh of rupees of the taxpayer on the purpose, in view of the more urgent needs of elementary education to-day. We are also sure that the present staff of the Kumbakonam College will have to be strengthened and improved in quality considerably, before it can be raised to the level of efficiency at which Honours classes can be opened. It is probably wiser for Government to concentrate attention on a single high-class institution for such advanced study than scatter it on more

than one weak institution. We trust the Hon. Mr. V. K. Ramanujachariar will strive to raise its level of efficiency as a college for the Pass-course, before embarking on the more ambitious scheme of having the Honours Courses in the college. There were however other resolutions of a general nature, of real importance to education, like the Hon. Mr. A. S. Krishna Row's, for New Elementary Schools, and those of the Hon. Mr. Venkatapathi Raju and the Hon. Mr. K. R. V. Krishna Row for additional training schools for masters, which at least met with a fairly encouraging reply from the Government. The Hon. Mr. T. Rangachariar was well-advised in inviting Government's attention to the need for looking into the question of the physique of boys in our schools and we hope H. E. the Governor's assurance on the subject will soon express itself in some definite action.

We heard a very eminent Indian complain the other day that India was the only country where education was seriously interfered with, by those who understood nothing of it, and it is interesting to see what England has done just now, in her choice of Vice-Chancellor Fisher as the new Minister for Education. In the world of English Education there has probably never been a more serious crisis, than that of to-day,

when there is a demand for a thorough overhauling of the whole national system of education. It is significant that in such circumstances, the choice should have fallen on such a practical adherent to the teaching profession as Mr. Fisher, who has worked in the two Universities of Oxford and Sheffield, and will thus possess the experience and inspiration of a University which has perfected the humanities, as well as those of another which has more directly attended to the needs of modern life. Mr. Fisher's work in the Sheffield University has been of a very remarkable nature, for besides bestowing considerable attention on the re-organisation of the various departments of the University, especially those of Engineering and the Applied Sciences, he has been able to bring the University and the city into such intimate contact that it has been said, that Mr. Fisher "has brought the University to the people and raised the people to the University." Mr. Fisher's opinions are fundamentally sound and progressive as may be seen from the following remark which he made the other day, when he was entertained at dinner by the University of London Club, and welcomed as "the right man in the right place:" "He said he was a great believer in the autonomy of the English Universities, and hoped that nothing he might do as President of the Board of Education would have the slightest tendency to abridge what he thought was one of the most precious features of our educational system."

NEW BOOKS ON INDIAN HISTORY.

1. **A Picture Story-Book of Indian History**, by Gabriel Festing, author of "From the Land of Princes," "When Kings Rode to Delhi," "Strangers within the Gates," etc., etc. [Will be shortly ready.]
 2. **Easy Stories from Indian History**, by S. W. Cocks, M.A., I.E.S. [Will be shortly ready.]
 3. **A Dramatic History of India**, by Mrs. Flora Annie Steel. [Will be shortly ready.]
 4. **A First History of India**, by J. Nelson Fraser, M.A., I.E.S. Second Edition. Price As. 12.
 5. **A First History of India**, by H. L. O. Garrett, M.A., I.E.S. Price As. 12.
 6. **A First Book of Indian History**, by S. G. Dunn, M.A., I.E.S. [Will be shortly ready.]
 7. **A School History of India**, by P. A. Wadia, M.A. Price Re. 1 6 as.
 8. **A History of India**, by R. B. Ramsbotham, M.A., I.E.S., and L. F. Rushbrook Williams. In the Press.
 9. **A Source-Book of Indian History (Hindu Period)**, by S. Krishnaswami Aiyangar, M.A., M.R.A.S., F.R.HIST.S., Professor of Indian History and Archæology, University of Madras. [In Preparation.]
 10. **The Student's Source-Book of Indian History (The Pre-Muselman Period)**, by H. L. O. Garrett, M.A., I.E.S. Price As. 10.
 11. **The Student's Source-Book of Indian History (Muhammadan Period)**, by H. L. O. Garrett, M.A., I.E.S. [In the Press.]
 12. **Medieval India from Contemporary Sources**, edited by Stanley Lane-Poole, M.A., LITT.D. Price As. 12.
 13. **India in the Middle Ages**, by Stanley Lane-Poole, M.A., LITT.D. [Will be shortly ready.]
 14. **New Readings from Indian History (British Period)**, by W. H. Hutton, Reader in Indian History in the University of Oxford. Price Re. 1-2.
- A Primer of Indian Administration**, by L. F. Rushbrook Williams, Fellow of All Souls College, Oxford; Professor of Modern Indian History in the University of Allahabad. Price As. 12.

K. & J. COOPER, Grant Road, BOMBAY.

The Educational Review

A Monthly Record for India.

VOL. XXIII.

APRIL 1917.

No. 4.

All literary contributions, books for reviews, newspapers or magazines, sent in exchange, &c., should be addressed to the Editor, No. 4, Mount Road, Madras. Articles and communications intended for publication in the succeeding issue should, as far as possible, reach the Editor not later than the 20th of the month. The Editor solicits contributions on all subjects of educational interest. Stamps should accompany the MS., if the writer wishes it returned, in case of non-acceptance. The Editor can in no case hold himself responsible for accidental loss.

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The Publishers request that Subscribers to the EDUCATIONAL REVIEW, who do not receive the REVIEW regularly, will kindly bring the fact to their notice immediately.

A PAGEANT OF SONG.*

BY PRINCIPAL P. SESHADRI, M.A.

THE good Bishop of Durham, Richard de Bury, author of the *Philobiblion*, laments the disastrous effects of war upon literature in the plaintive words: "Then the wise Apollo becomes the Python's prey and Phronesis, the pious mother, becomes subject to the power of Phrenzy. Then winged Pegasus is shut up in the stall of Corydon, and eloquent Mercury is strangled. Then wise Pallas is struck down by the dagger of error, and the charming Pierides are smitten by the truculent tyranny of madness." If he came back to life after his sleep of centuries, he would probably be astonished that in spite of one of the greatest wars ever waged in History, books continued to appear in England, and there was inclination and facility enough, even for publications of the class

under review. The longing for artistic book-making is not very different in spirit and inspiration from the love of true poetry, and the presentation of this Pageant of Song in the famous eleven point Ricardi Fount, with covers bearing the special design of the Three Rings associated with the early Medici, must be welcome to every student of literature. The selected classics have either special appropriateness—unconsciously perhaps—to the present circumstances of the world, or are related to the eternal verities of religion upon which man falls back for strength in his moments of gloom and despondency.

With the sword of England unsheathed for the championship of Liberty, and the great democracies of the West leagued in common fight against the ruthless militarism of Prussia, the selected poems of Wordsworth* read with a new significance. The Happy Warrior who

* *Memorabilia*, reprints of the publications of the Medici Society, by the Oxford University Press. 1s. each.

* The *Happy Warrior* and other Poems.

Finds comfort in himself and in his cause;
And, while the mortal mist is gathering, draws
His breath in confidence of Heaven's applause

is not a mere poetic ideal, one which "every man in arms should wish to be." He is seen every morning in the papers; a simple cross marks his grave in Flanders; his bleached bones lie scattered on the rocks of Gallipoli; his blood is absorbed by the sands of Sinai and the date-palms of Mesopotamia can bear witness to his heroism. The message of the *Ode to Duty* has met with the same intense realisation. Millions are those who have supplicated her control, 'through no disturbance of their soul,' or 'strong compunction in them wrought.' The other pieces also seem to have been chosen with the same purpose in view. We hear the two voices, that have been the chosen music of liberty from age to age, one of the sea and the other of the mountains and we see before us the most effective demonstration of the fact:

It is not to be thought of that the flood
Of British Freedom, which, to the open sea
Of the world's praise, from dark antiquity
Hath flowed, 'with pomp of waters unwithstood,'
Roused though it be full often to a mood
Which spurns the check of salutary bands,
That this most famous stream in bogs and sands
Should perish; and to evil and to good
Be lost for ever.

It is a long way from the thrilling inspiration of these poems of war and liberty to the soothing melancholy of Gray,* but with the strenuousness and energy imposed on almost all the civilised world by the present war, the longing for quiet corners of peaceful meditation is also probably inevitable. It was this which impelled our present laureate to compose the anthology of consolatory passages, *The Spirit*

* *Elegy* written in a Country Churchyard and other Poems.

of Man soon after the outbreak of the war. We have it in the Churchyard of Gray's *Elegy*, in the evening twilight, with the curfew tolling the knell of the parting day, the lowing herd winding slowly o'er the lea, the beetle wheeling his droning flight and drowsy twinklings lulling the distant folds. How few are the places where German aggression has left such scenes inviolate, in some of the fairest lands of Europe, and who will not gladly relieve the tragic tension of his mind, by musing on this picture, found at least in song? The sober scholar who preferred the Professorship of History and Modern Languages at Cambridge to even the Poet Laureateship, and who was content only occasionally to sing his 'frugal note' of a somewhat melancholy kind, had a more active side to his poetic inspiration and we see it receive adequate recognition in this selection. We have the *Descent of Odin*,

Uprose the king of men with speed,
And saddled straight his coal black steed:
Down the yawning steep he rode,
That leads to Hela's drear abode.

There is the Bard standing on the rock whose haughty brow frowns o'er old Conway's foaming flood; invoking curses on the conqueror of Wales in the terrible words:

Ruin seize thee, ruthless king!
Confusion on thy banners wait.

By a curious accident, recent happenings in the political world of Europe,—the convulsion in Russia, and the frantic attempt of the Kaiser to meet by promises the democratic fury that will overwhelm him in his own country, even if he escapes the vengeance of his indignant enemies—lend an effective interpretation to the grim observation in the *Hymn to Adversity*:

Bound in thy adamant chain,
The proud are taught to taste of pain,

And purple tyrants vainly grow
With pangs unfelt before, unpitied and alone.

When presenting his *Treasury of Sacred Song* to the world, Palgrave had no hesitation in saying that he was keeping the ideal of 'Poetry for Poetry's sake' in the selection of every piece, and it is not surprising that several theological poems* should figure in the *Memorabilia*. The religious strain has existed in English Poetry from the earliest times and *Quia Amore Langues* and *Richard de Castro's Prayer* are among very early pieces belonging to the fifteenth century. With Herbert singing in his quiet Wiltshire valley and Vaughan among the wild hills of Brecon, enriching the language with some of the best devotional song, the strain becomes more marked and has existed with unabated energy down to our own times, as may be seen in the mystical verse of Francis Thomson or in the facility with which the editors of the recent *Oxford Book of Mystical Verse* have found material for their anthology. *The Ode on the Morning of Christ's Nativity*, with its full and resonant music is probably a very effective illustration of Tennyson's eulogy of the poet as 'a god-gifted organ-voice of England,' an expression specially appropriate to him, in his capacity as the author of this piece. Browning's *Christmas Eve* and *Easter Day* are not theological poems in the strictest sense, but in addition to the interest they possess as giving an account of spiritual adventure on the dark common, they have several fine passages of beautiful poetry, among them the well-known description of sky-scape:

* Milton's *Ode on the Morning of Christ's Nativity*; Browning's *Easter Day* and *Christmas Eve*; *A Book of Carols*; *Quia Amore Langues* and *Richard de Castro's Prayer*.

Suddenly

The rain and the wind ceased, and the sky
Received at once the full fruition
Of the moon's consummate apparition.
The black cloud barricade was riven,
Ruined beneath her feet, and driven
Deep in the West; while, bare and breathless,
North and South and East lay ready
For a glorious thing that, dauntless, deathless,
Sprang across them and stood steady.
'Twas a moon-rainbow, vast and perfect,
From heaven to heaven extending, perfect
As the mother-moon's self, full in face,
It rose distinctly at the base
With its severe proper colours chorded,
Which still, in the rising, were compressed,
Until at last they coalesced,
And supreme the spectral creature lorded
In a triumph of whitest white,—
Above which intervened the night.
But above night too, like only the ext,
The second of a wondrous sequence,
Reaching in rare and rarer frequency,
Till the heaven of heavens were circumflexed,
Another rainbow rose, a mightier,
Fainter, flashier and flightier,—
Rapture dying along its verge,
Oh, whose foot shall I see emerge,
Whose, from the straining topmost dark,
On to the key-stone of that arc?

True, Stopford Brooks would not have found much in it, for treatment in his *Theology in the English Poets* even if he had not stopped with Burns, but had come down to the end of the nineteenth century, to include Browning in his critical purview—but we are viewing a Pageant of Song. *Easter Poems* and the *Book of Carols* furnish within the short compass allowed by the brief design of the series a good collection of similar poems.

We trust no apology is needed for including another number of *Memorabilia* in this series, though it is not in any of the conventional verse-forms, because, it is the imper-

sioned address* of Pericles over those fallen in the war. It is no exaggeration to say that by its loftiness of sentiments, and felicity of expression, not to speak of the unity and completeness of its theme, it is almost a lyric. All the original pictorial charm of Thucydides is there, preserved unimpaired by the careful translation of Mr. A. E. Zimmern. Over how many graves may not the noble words of Pericles be uttered again to-day :

"So they gave their bodies to the common-wealth and received, each for his own memory, praise that will never die, and with it the grandest of all sepulchres, not that in which their mortal bones are laid, but a home in the minds of men, where their glory remains fresh to stir to speech or action as the occasion comes by. For the whole earth is the sepulchre of famous men, and their story is not graven only on stone over their native earth, but lives on far away, without visible symbol, woven into the stuff of other men's lives."

Is not this too part of the Pageant of Song?
(To be continued.)

* The Ideal of Citizenship, translated from the Greek of Thucydides.

In Active Preparation.

COLLEGE ALGEBRA

A Text-book for the Intermediate and
B.A. Classes

BY

K. R. RAMASWAMI AIYANGAR, M.A., L.T.
Professor of Mathematics, College of Engineering, Madras.

Srinivasa Varadachari & Co., Madras.

A FEW IDEALS FOR OUR YOUNG MEN.*

IT need not be said that, young men, as the rising generation, are really the hope and stay of every country. Seeing that the young men of to-day are but the citizens of to-morrow and will have an important share in moulding the destinies of their country, it may easily be understood that the future of a country is, to a great extent, in the hands of her young men. Hence, the great importance attached in all ages and in all climes, to the education and training of youth. In India too, of late, a new 'angle of vision' has been appearing with reference to young men. Without any exaggeration, it may be observed, that all over the country, under the guidance of trusty leaders, young India is to-day getting awake, alert, and astir with a new enthusiasm. It was only the other day that a Students' Convention was held at Madras under the presidency of that Grand Old Man of Southern India—that Nestor of our educated men, viz., Dr. Sir S. Subramaniya Iyer. Conventions of a similar nature are being held in other places also. An All-India Students' Convention has been proposed. In the second place, we find that everywhere great interest is now taken in the Boy Scouts' movement and that, recently, a Conference was held by the Governor to consider its introduction in our schools. If the movement becomes a success, it will be of no little value in training the hands and legs of our boys, in instilling in their minds many qualities of a laudable nature and in making them, in several ways, worthy and useful members of their communities. In the third place, we find that, in many places, the activities of young men are now being enlisted in the cause of social service. From all this, it may be seen that a wave of enthusiasm is now sweeping through the juvenile world of India. It may be a

* Being an Address delivered at the anniversary of the Young Men's Literary Union, C. M. S. High School, Trichur (Feb. 1917), by Mr. P. S. Ramakrishna Aiyer, M.A., L.T., Lecturer in History, Ernaculam College.

trickle now that we see, but we will hope that it will soon broaden into a stream and, in the fullness of time, swell into a mighty flood.

Having regard to these signs of the times, it may well be deemed that my choice of subject has in no way been inappropriate. What are ideals? "Ideals," observes a certain writer; "are truths that have not yet effected themselves for man, the realities of a higher plane of existence which have yet to fulfil themselves on this lower plane of life and matter, our present field of operation." In the case of individuals as well as of nations, it need not be said, the influence of ideals is always very great. It is my purpose this afternoon to speak to you on just a few ideals, as they seem to me important, especially having regard to the conditions and requirements of our country to-day.

I.

The first ideal that may be placed before you is that *you should cultivate a love of knowledge and a habit of study*. The complaint is often made about educated Indians that, once they leave their schools or colleges, they cease to be students and bid adieu to their books. There are many circumstances, no doubt, that can be urged in explanation, nay in extenuation, of this state of affairs which certainly is to be deplored. Nonetheless, it appears to me that, in the case of not a few of our educated men, it must be possible, if only they have a will, to maintain habits of study and research all their lives.

'Art is long and time is fleeting' says the Poet. The fact must be noted that, in each and every subject, the domain of knowledge is ever extending. It is not one ocean of knowledge that we have now to deal with but several oceans and these oceans are ever growing. Having regard to all this, it need not be said that, if one wishes to make any substantial advance in knowledge, one has absolutely no time to lose but must devote every moment one could spare, to the service of the Muses.

How is knowledge to be derived and wisdom too?

Mainly from books. Books are certainly the mines of knowledge and the founts of wisdom and it must be the noble ambition of every man to be constantly delving at these mines and drinking from these founts. It need not be said that no companionship could possibly be sweeter, more delightful, more inspiring than the companionship of books. Once we enter the golden threshold of literature, we come into living contact with glorious master-minds, so ready to hold a silent communion with us at all hours. Referring to books, Southey observes—

'My never-failing friends are they
With whom I converse day by day.'

Books says Wordsworth :—

'Are a substantial world, both pure and good
Round which with tendrils strong as flesh and blood,
Our pastime and our happiness can grow.'

'A good book,' says Milton, 'is the life-blood of a master-spirit embalmed and treasured-up on purpose for a life beyond life.' The book is the living voice and it is through books that we hold communion with

The dead but sceptred sovereigns who still rule
Our spirits from their urns.

It should therefore be the noble ambition of one and all of us 'to make books our friends and study them unto the noblest ends.'

It is not every book however that is a good book. In fact for every good book that is published, scores of bad or indifferent books are given to the world and it may be said without exaggeration that bad books are as numerous in the world as the stars of heaven. A judicious choice of books is then of very great importance. A great deal of literature has already been published in this connection and all this literature must be of great value to us all.

Apropos the study of books, a few general suggestions will now be offered.

In the first place, it should be noted that there are certain books in this world which are books for all ages and for all climes and which, every man

whatever his special tastes and pursuits might be, ought to cherish as price-less treasures. These books are perennial wells of wisdom. Instead of belonging to any particular nation, they are the glorious heritage of all humanity. They will be found to range over all ages and all climes and some of them are the oldest in literature. To quote Bulwer Lytton, 'in literature the oldest books are however the best.' Among these priceless treasures, the place of honour may well be given to our own song celestial—the Githa—than which no grander philosophy of life and conduct the world has ever seen. Then there are our national Epics, the sayings of Solomon, the Bible, the Koran, the sayings of Confucius, the writings of Plato and Aristotle, the Essays of Cicero, The Meditations of Marcus Aurelius, Bacon's Essays, Goethe's works, the writings of Carlyle, Emerson and Ruskin and coming to our own country, the works of such sages and thinkers as Sri Sankaracharya, Chaitanya, Kabir, Nanak, Tulsi Das and last but not least, the writings of the great Bengalee sage and poet of to-day Sir Rabindranath Tagore. In addition, will be found in the realm of literature, certain master-minds—Homer, Dante, Shakespeare, Kalidasa—whose works too are 'possessions for ever,' which every man will do well to read, mark and inwardly digest.

In the second place, the ambition of every one must be to specialise in some particular department and, at the same time, keep himself abreast of at least the general movements in all branches of knowledge. 'Something of everything and everything of something' must, as far as possible, be every man's motto. Having regard to the rapid progress of knowledge and further the need for augmenting knowledge, specialisation is essential. Lest, however, as a result of specialisation, one's mind should get unduly cribbed and narrowed, a certain breadth of culture is at the same time highly desirable.

In the third place, I may repeat to you, the advice once given by James Bryce that, in every

subject, the best books alone should be read—for we have hardly time even for such books—and further that rapid reading should be practised, since, otherwise, no substantial advance in knowledge is possible. Further, it is necessary that our reading should be critical and intelligent. In Dr. Arnold's words "we must ask questions of the book and of ourselves; what is its purpose; by what means it proceeds to effect that purpose; whether we fully understand the one; whether we go along with the other; do the arguments satisfy us, etc., etc." A book once read in this way becomes our own for all times, slides, as it were, into the mind and becomes part and parcel of our knowledge.

II.

The second ideal that I would place before you is that, in your scheme of studies, *you should, as Indians, pay some special attention to Indian culture and studies.* It need not be said that, in our system of education, Indian studies hardly receive the attention they deserve and that the ignorance as well as the indifference that most of our educated men display in connection with these are indeed sad to contemplate. Nothing, however, could possibly be more unwise or unpatriotic on our part than to neglect our own culture and studies. The culture enshrined in Sanskrit was not merely the culture of our ancients but, to a great extent, is still the living culture with us. Hence, not merely to understand our ancients—their civilisation, polity, ideals, beliefs, customs, arts, industries, etc.,—but also to understand ourselves to-day and to properly chalk out the lines of our future progress—especially social and religious, a careful and intelligent study of Sanskrit is indispensable. More attention should also be paid by educated Indians to the Vernaculars since it is only through their medium that the education and the elevation of the masses can be accomplished. Without a careful study of Indian History—of the lives and achievements of our great ancestors—how is it possible for an

Indian to feel the pride of patriotism and of nationalism? In the full tide of patriotic glee, every English school-boy will be found to sing,

Ours are Hampden's Russel's glory
Sydney's matchless shade is ours
Martyrs in heroic story
Worth a thousand Agincourts.

If our young men too are to feel the same patriotic glee, then they must certainly pay special attention to the history and literature of their own land. If, again, an Indian youth is to properly prepare himself for the duties of citizenship and of patriotic service, he can, by no means, afford to neglect such subjects, as Indian Economics, Indian Civics, Indian Sciences, Indian Sociology, etc.

In thus making a strong plea for Indian studies, by no means do I belittle the value of western culture and learning for Indians nor mean that they might safely be neglected. They have indeed come to stay in this country and we can never dispense with them. All that I mean is that if we should attach great value to foreign culture we should attach even greater value to national culture.

III.

The third ideal that I would place before you is that *you should cultivate habits of observation, of inquiry and of research.* You know that the charge is often flung in the teeth of Indian students that they are deficient in these qualities. In the course of an address recently delivered at the Teachers' College, Saidapet, the Principal of the Coimbatore Agricultural College seriously complained that the temperament of Indian boys is speculative or metaphysical rather than practical. Probably there is some truth in these complaints. But then it is not so much the boys that are to blame as the teachers themselves and the defective system of education that is followed. A large proportion of the teachers themselves, trained as they have been under a defective and vicious system, will probably be found deficient in

powers of observation and inquiry and consequently unfitted to develop these powers in their pupils. Further it will be found that few and far between are those schools where the Kindergarten system is followed, where object lessons and nature study are insisted upon, where well-equipped laboratories are maintained, where realistic methods of teaching are properly followed, where in a word, adequate attention is paid to the training of the hands and eyes of pupils.

Be all this as it may—it must be observed here that there are unlimited possibilities for research-work in this country and further that, with proper training, the Indians are not wanting in a capacity for such work. In connection with subjects such as Indian History, Indian Archaeology, Indian Ethnology, Indian Arts and Sciences, Indian languages, Indian agriculture, tropical diseases, applied chemistry, there is almost unlimited scope for investigation in this country. Many Indian workers are also diligently engaged in these fields and substantial results have already been achieved by some of them. The scientific researches of Prof. Bose have brought him a world-fame. The researches of Prof. Roy and Prof. Raman are also well-known to us. The Mathematical researches of Mr. S. Ramanujan and the unique flights of his genius have evoked the wonder and admiration of some of the greatest 'savants' of the West. The historical researches of Jadunath Sarkar, Radhakumad Mukherji, Noren-dranath Law to name but a few, have shed a new light and lustre on many aspects and ages of Indian History. The fields are many and vast but the toilers are few. Consequently more and more of our young men may have to turn their attention to research-work in the years to come.

The importance of all this research-work for the progress of this country cannot possibly be over-estimated. Thanks to the results already achieved, a great many stereotyped and wrong notions about the East are getting exploded and right notions are coming to prevail about Indian character.

capacity and genius. The idea of the unchanging East has been disproved. The notion of Indians being but a theoretical people without any practical genius has been rudely shaken. The idea of oriental despotisms can no longer hold ground. Thanks to the researches of N. N. Law and others, we have been made to understand that ancient Indian Polity, instead of being merely a mere money collecting despotism, was highly progressive and enlightened, actuated by the highest ideals, and with not a few practical achievements to its credit.

IV.

The fourth ideal that may well be placed before you is that *you should cultivate habits of industry and application.* It need not be observed that, for success and distinction in this world, it is not genius that is so much required as industry and application. By Carlyle—a monument of industry himself—genius has only been defined as ‘a capacity for taking pains.’

The heights by great men reached and kept
Were not attained by sudden flight;
But, while their companions slept
They were toiling upward in the night.

In the case of almost every man that the world regards great, the truth of the above lines will be found illustrated. In our own country, the extraordinary success of the late Mr. Gokhale was, to no small extent, due to his devouring passion for work which, alas! was only carried by him to lamentable excess.

This is what a great author observes:—“It is idleness that is the curse of man and not labour. Idleness eats the heart out of men as of nations and consumes them as rust does iron.” In the words of Burton, “idleness is the bane of mind and body, the nurse of haughtiness, the chief mother of all mischief, one of the seven deadly sins, the devil’s cushion, his pillow and chief reposal.” In this connection, it may also be worth while for us to bear in mind the following splendid observation of Walter Scott’s—“One hour of life crowded to the full with glorious action and filled

with noble risks is worth whole years of those mean observances of paltry decorum, in which men steal through existence, like sluggish waters through a marsh, without either honour or observation.”

One important way in which Indians have been influenced by western civilisation is ‘certainly in the direction of greater earnestness and strenuousness of life. As observed by Sir Alfred Lyall, the mission of the West to the East is the mission of a strenuous life:—

Fast and pray—said the sages of Ind
We know not what prayer and penance may give
For visions are fading and words are wind
The faith we bring you is “Labour and live.”

V.

The fifth ideal that I would invite your attention to, is that *every young man should cultivate the ambition of patriotic service, eye of doing ‘some good noble work here underneath the sun.’* It must in fact be the ambition of one and all of us to belong to that noble band,

Whom a thirst
Ardent, unquenchable, fires
Not with the crowd to be spent
Not without aim to go round
In an eddy of purposeless dust,
Effort, unmeaning and vain.
Ah yes! some of us strive
Not without action to die
Fruitless, but something to snatch
From dull oblivion, nor all
Glut the devouring grave.

It may be observed here that many are the lines of useful and patriotic activity open to educated Indians to-day. There is mass education, the elevation of the depressed classes, social and religious reform, agriculture, industries, literature, journalism, politics. It must be quite possible for every person, however limited his capacity or his opportunities, to render some useful service in any of these directions, if only he has the will.

Even in the case of students, some lines of useful activity may well be chalked out for them, as was done by Prof. J. Sarkar, in a recent

address. During vacations and at other times, without prejudice to their studies, much may be done by them ‘to diminish the appalling mass of illiteracy in the country.’ If every young person could teach the 3 R’s, say to 10 of his neighbours, that would mean much. Or much may be done by them to spread a knowledge of hygiene and sanitation among village folks. Or again simple lectures may be given by them on subjects like history and geography and healthy ideas of social reform may be preached as well as practised by them. In these and other ways, the well-being of the community to which they belong may be improved and its social and moral tone, elevated by them. May I then make this appeal to you in the thrilling words of Mrs. Sarojini Naidu:—“Let every man say—Has God given to me a greater destiny than this, that I become the standard-bearer of my country’s honour, that I become the soldier of her cause, the champion of her weak, the defender of her glory, the creator of her regenerated power among the nations of the world.”

VI.

The last ideal that I propose to place before you is that *you should all realise the nobility of life and conduct yourselves in a fitting manner.* To quote the words of Gladstone, ‘remember that life is no mean and grovelling thing that you are to shuffle through as best you can, but a lofty and exalted destiny.’ You must not only learn to eschew all base thoughts and vulgar feelings but fill your minds with sublime ideas, ideals and sentiments. You must learn to cultivate virtues of various kinds and to lay the foundation of a pure and exalted character. It is for you to cultivate such virtues as obedience, a sense of duty, reverence for superiors, toleration, sympathy, perseverance, moral courage. You must remember that—

The sweetest lives are those to duty wed
Whose deeds, both great and small,
Are close-knit strands of an unbroken thread,
Where love ennobles all.

XXIII

The world may sound no trumpet, ring no bells
The Book of life the shining record tells,
Thy love shall chant its own beatitudes
After its own life-working.

Many of you must have learnt the ideal of the ‘Happy Warrior’ as portrayed by that English poet ‘that uttered nothing base.’ You cannot do better than always keep that ideal before you and strive earnestly and incessantly after it. If, however, you want a national ideal, I cannot place before you a higher or a more inspiring one than the life of your great national hero—Sri Ramachandra—the hero of the Ramayana. His life must be a veritable sermon to us all. May it ever be our inspiring ideal!

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THE TIME-REVERSING DEMON.

To

The Editor,
"The Educational Review,"
Madras.

SIR,

Allow me to invite attention to the conception of the Time-Reversing Demon, which, though comparable in its quaintness and importance with that of Clerk Maxwell's Sorting Demon has so far lacked its proper quota of scientific notoriety. In fact, in so far as is known to the present writer, it has not enjoyed any public recognition save that of a cursory notice at the hands of Karl Pearson in the Grammar of Science and an indirect elucidation by Sir Robert Ball.

The late Lord Kelvin delivered a Friday evening lecture before the Royal Association on the Sorting Demon of Clerk Maxwell and thereby elucidated several problems connected with the doctrine of the dissipation of energy. I hope that the brief account of his colleague given here would induce others to take up his cause.

All that we need grant to our demon are exaggerated powers of flight and vision, so that he can travel in space with any velocity even grater than that of light and behold objects of any size from any distance. Thus equipped our demon can launch into space and make all sorts of oberrations ranging from total reversibility to a complete cessation of the course of time.

Flying away from the earth at a pace greater than the velocity of light, he can see all natural processes reversed: men entering life through the grim portals of death, growing younger and finally leaving it by birth; mankind marching from civilisation to bar-

barism; Christians and Musalmans flourishing before the advent of Christ and Mohammad, complex types of life growing simpler, evolution changed into devolution, the earth growing hotter and hotter, days and months becoming shorter and shorter, with the moon moving spirally nearer and nearer to it, until it falls into the earth and the earth disappears in a nebulous haze. Beyond the earth, we do not roam with the demon for tracing the cosmic evolution backwards.

Moving towards the earth, the demon could accelerate the course of time, could see the whole human history compressed in a few years or in months, *e.g.*, stationing himself at a distance of about a thousand light-years from the earth, wherefrom William the Conqueror is seen entering London, he can rush through space, see kings and queens crowned in rapid succession until when he is half way between our nearest stellar neighbour and our sun, the Great European War unfolds its horrors before him from beginning till now.

In brief, the demon can by moving away or towards the earth, go backward or forward in history. He will thus be a veritable "traveller in time" though not riding the "Time Machine" of H. G. Wells.

Further, by moving away from the earth with a uniform pace equal to the velocity of light he can live in an everlasting present—an "eternal now"—making time cease to flow for him. (Thus may the dream of the oriental poet about perpetual youth be realised). Moving towards the earth with the velocity of light he can live in an unending past until he alights upon the earth.

Thus every kind of life is possible for our

demon. The kind of life depicted above for our time-reversing demon can be partially visualised by observing a bioscope film shown backwards.

There are two other hypothetical suggestions which might be made in connection with the above.

(a) If the demon could watch the image of the earth, as formed by reflection from the surface of the stars, he could by simply shifting his glance from star to star study the past without moving through space. Thus the demon need not necessarily be gifted with enhanced powers of locomotion—only an immensely keen gaze would do.

(b) If the demon could move round the earth along any parallel of latitude, with an equal angular velocity day and night would cease for him and the flux of time would apparently come to a standstill. Further by moving at a greater angular velocity, he would see the day progressing from evening to noon and from noon to morning.

EXPLANATORY NOTE.

Sound travels 1100 feet of air in one second, so that sound waves, emitted by a source of sound at the beginning of a second are at a distance of 1100 ft. from it at the end of the 1st second, 2200 ft. at the expiry of two seconds and so forth. Hence a noonday gun fired at exact midday (12 hr. 0 s. 0 m.) will be heard at 5 seconds past 12 at a distance of one mile or at 1 minute past 12 at a distance of 12 miles. An accurately timed chronometer should not therefore indicate exact 12 hours at the instant when the report of a distant midday gun is heard. Thus the time-equation of any two stations between which texact chronometric relations are to be maintained, must be known.

The consequences of the finite velocity of sound are, as a matter of fact, the basis of the direct determination of the velocity of

propagation of sound in air or water. Further granting the audibility of sound over an hypothetically long range, it is easy to see that if an observer were to travel away continuously from a station at which cannon were fired after *equal* intervals of time, he would hear the reports after *unequal* intervals of time which would gradually increase as his distance from the sounding station increases.* This phenomenon is the analogue of a major portion of the subject-matter of this letter, and as all students of Science know, it also explains how Roemer determined the velocity of light from observations of eclipses of one of the moons of Jupiter,

Since the velocity of light is so tremendously great (186,000 miles in a second or about one crore—10 million miles per minute) that it can completely go round the whole earth more than seven times in a second, ignoring the negligibly small fraction of a second taken by the lightning flash to reach the eye, we can readily find the distance of a lightning cloud in miles by dividing with 5 the number of seconds lapsing between the flash and the report. But when immensely big distances are to be travelled, time taken by light waves to span them becomes of appreciable importance. Light reaches us from

* Note on the famous Krakatoa Eruption of August 27, 1883.

The eruption occurred at 10 A.M., and the actual sound of the explosion was heard at 2 P.M., full four hours after it happened, on the other side of the Indian Ocean, by human ears. The words, *heard by human ears* are added here advisedly, since the gigantic sound wave started by the tremendous explosion was traced in its career for more than a week by sensitive self-registering air-pressure measuring instruments, girdling the whole earth seven times within its mighty compass. In this connection, it might be useful to note that sound waves travel about 741 miles in an hour which is equivalent to more than fifteen times the speed of an average express train.

the sun in about 8 minutes, so that the sun remains actually before our eyes (above the horizon) for more than 8 minutes before we see it; on the other hand we keep on seeing it long after it has set. If any catastrophe were to happen at any time on the surface of the sun, even if we could, we would not be able to see it till after 8 minutes.

Light reaches us from the nearest star in about 4 years; thus all our astronomical observations about our nearest neighbour in the starry realm are four years too late. If for any reason that star were to be destroyed now or to become non-luminous, we would still continue taking our observations about it for 4 years, as if nothing has happened.

The distances of the stars are so great that the ordinary units of length cannot adequately express them, e.g., alpha centauri (our nearest starry neighbour) is about 20 billions of billions miles, i. e., we express its distance by writing a 2 first and then writing 13 ciphers after it. (It would take about a quarter million years to count this number). The brightest star (Sirius—popularly called the Dog-star) is so far away from us that its light reaches us after 20 years (approximately). The distance travelled over by light in one year is called a *light-year* and the distances of stars are measured with this new unit. There are stars which are at distances of thousands of light years from us and who knows there might be myriads of stars in the depths of space whose light has not yet reached our earth,

F. D. MURAD.

PHYSICAL LABORATORY,
M. A. O. COLLEGE,
ALIGARH.
15-4-1917.

PROGRESS OF ENGLISH INSTRUCTION IN THE MADRAS PRESIDENCY.

II. A REVIEW.

THE REFORM MOVEMENT.

IN the statistics published in the last August number of this Journal, we found that, if English instruction was bad under the old system up to 1906, it has since fared no better with the so called improvements in the methods of teaching English in our schools. The wonder of it is that in spite of so many up-to-date principles, skilfully laid schemes, equipments and arrangements, teachers specially trained on modern lines, instruction in schools has showed no real or substantial improvement. The Universities Commission, in their report published in 1902, pointed out the insufficiency of the command in English acquired by students in High Schools and Colleges. Then the Indian Government made arrangements to send educationists to Europe for the purpose of studying modern and improved methods of teaching the several subjects of school instruction. The results of their studies and experiences in Europe appeared in the Occasional Reports published by the Indian Government. In the light of the advances made by the most forward countries of Europe, the Provincial Governments inaugurated a reform in our educational system, so thorough and radical in its nature that almost everything old was swept away and quite a new state of things has been brought into being. Of all the changes thus introduced, those relating to English instruction seem to be the most important, inasmuch as they affect the foundations of our educational system, and form, as it were, the vital element in our schools with reference to the medium of instruction on which depends the whole superstructure. The perfection or otherwise of the acquisition of knowledge in our schools depends mostly, if not entirely, on the command which our pupils possess in English. If English instruction is satisfactory, the students can be expected to acquire knowledge with ease and facility; otherwise, the whole superstructure

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must remain unsound. As it is now a decade since the reform was initiated, the Department and the University will do well to institute an inquiry into the state of English instruction in our schools, with a view to ascertain how the present system compares with its predecessor. This will enable us to gauge with some degree of certainty the extent of the usefulness and efficiency of the recent reform.

OBJECTS OF ENGLISH INSTRUCTION IN INDIAN SCHOOLS.

Before I proceed to the subject proper let me draw the attention of the public to the objects for which English is taught in our schools. The memorable despatch of Macaulay explains the two-fold necessity of English to the Indians; first, to furnish a common vehicle of thought to a nation split up by diverse languages, and secondly, to make it the basis of general education inasmuch as the Indian vernaculars possessed no literature worthy to form the basis of a sound national education in all its phases. It was in this way that English has come to be and ought to continue both as an end in itself and as a means to education; and it is incumbent on us to watch with the utmost diligence the progress of English instruction in our schools. We cannot afford to let it alone, and I believe we cannot pay too much attention to it.

THE WORK OF THE DEPARTMENT.

For reasons like these, the Madras Educational Department, in their earnestness to improve English instruction, has been sparing no pains. The departmental regulations from the old Standing Orders down to the present day 'Hints and Suggestions' invariably contain elaborate instructions for the guidance of teachers in the matter of English instruction. They followed a particular course up to 1905 and about 1906 was inaugurated a change in the methods of teaching English. Thus the year 1906 forms a landmark in the educational annals of the Presidency so far as methods of teaching English are concerned; and it is our business at this stage, after ten years of experience with the

reform, to make comparisons between the old and the new and ascertain which way the reform is taking us. The statistical review referred to at the outset reflects no more credit on the present system. Let us now take a historical review of the methods of teaching English in our schools, mark the distinguishing features of the old and the new systems and examine how far the present system of teaching English in our schools is in keeping with the progress of linguistic methods out in the world.

THE DEPARTMENTAL INSTRUCTIONS.

This review covers a period of thirty-five years from 1881—1915, the same as that covered by the statistical review. Of this a quarter of a century relates to the old and the remaining decade to the new system. The old system worked at first under the Departmental Regulations embodied in the Standing Orders from about 1881—1890; then for about 15 years under those in the Educational Rules. The present system from about 1906 is working under the instructions contained in the 'Hints and Suggestions.' The old regulations recommended and insisted upon the adoption of translation as an indispensable means for acquiring English. The following extracts indicate the lines on which English instruction was meant to proceed in our schools:—

THE STANDING ORDERS (1880—1890).

(1) "The most effectual way of ascertaining whether a pupil understands the meaning of a passage is to make him construe it word by word into the vernacular, or to make him translate it on paper. But construing and translation are often neglected."

(2) "One important feature in the new English Readers is a graduated series of exercises in translation. These translations should be chiefly done by the pupils at home with the aid of grammars and dictionaries and the exercises should be occasionally set and should consist of sentences or passages selected by the teacher from books unknown to the pupils and dictated to them."

(3) "The scheme provides for translation being taught systematically in every class from the second upwards, the pupils beginning with simple sentences and gradually advancing to fables, descriptions and more difficult pieces. The selection of the matter is left to some extent to the discretion of the teacher, but the

quantity is specified and the exercise books containing the translations are to be exhibited when the school is inspected."

THE MADRAS EDUCATIONAL RULES (1890-1905).

(4) "The regular translation exercises also both from the vernacular language of the pupil into English and *vice versa* require to be conducted by teachers who know both languages well."

(5) "The practical command of English which pupils possess is much more limited than it ought to be, and with the view of remedying this deficiency it is recommended:

That oral translation from the vernacular language into English of detached sentences, involving some idiom or peculiarity of construction form a short part of every lesson in English, the object to be aimed at being readiness and accuracy of rendering."

THE ESSENCE OF THE EXTRACTS.

These extracts clearly indicate the importance attached by the old school to translation. The Department did not stop with these general instructions; they incorporated the same principle in every detail of English instruction. First, the curricula for the several standards, classes and forms included translation among the items of English instruction; it was prescribed from the lowest English learning class to the highest. Secondly, translation is prescribed in all sorts of examinations—the weekly and other periodical school examinations, the public examinations for results grants, and the late Upper Primary and Middle School examinations. The degree of importance attached to translation in public examinations can be judged if we note the proportion of the marks prescribed for translation under the examination in English:—

For the Upper Primary Examination—50%.

For the Middle School Examination—50%.

Thirdly, translation exercises were prescribed for home-work, and the departmental instructions relating to the exercises in translation were so minute that they laid down rules as to the size of the book and even how it should be ruled. Fourthly, they provided against neglect of this item of English instruction by insisting upon the exhibition of exercise books at the annual inspection. Fifthly, in corroboration of the departmental views on translation, the University

allotted one paper to translation under English in the three University examinations, Matriculation, F.A. and B.A. from about 1892 to 1909. Sixthly, it needs no mention that some periods must have been allotted to translation to carry out the departmental instructions.

BEGINNING OF A REFORM.

With all this care English instruction was found to be producing unsatisfactory results; and eminent educationists in our country turned their attention to the educational progress abroad and found out a reform that was being carried on in Europe in the matter of teaching foreign languages. An attempt was then made to reform English instruction in our schools on the lines advocated in Europe for the teaching of foreign languages. As a result of this movement there came out in 1901 an additional item of English instruction under the title of conversational lessons. They were prescribed for the two lowest classes and thenceforward was begun an improvement in the teaching of English. But what is noteworthy about this reform is that it in no way interfered with the departmental instructions on behalf of translation. The conversational lessons and similar items were meant merely to supplement the other items, not supplant them. The instructions about translation remained intact—in regard to teaching, exercises, home work, examinations and time-tables. The object aimed at by this introduction was the practical command of English, which the older items of English instruction with translation and grammar for their basis had failed to furnish. Even in the face of this failure, the faith of the old school in translation and grammar remained unshaken. The authors of the innovation, however, insinuated against translation and grammar, but had not the boldness to condemn it. Whether in earnest or otherwise, they retained the old order of things and only supplemented it by introducing conversational lessons, oral composition and such other items. Thus the old school principles and the reform lines began to work side by side at the beginning of the present century, and there was every reason to expect

GIST OF THE NEW SYSTEM.

These hints attempt to draw the attention of Indian schools to the progress made in Europe in linguistic methods and recommend the adoption of these principles in our schools. The essentials of the reform can be summed up by saying that translation, as being more baneful than beneficial to the acquisition of a foreign language must be reduced to the minimum, if not entirely given up; that, instead, all teaching of English must be done by associating the foreign symbols with their corresponding concrete counterparts. The letter as well as the spirit of the law, however, seems to give wide choice to the schools by allowing them to observe the foreign school and adopt the principles propounded by eminent educationists abroad in the matter of teaching foreign languages. We are thus made to open our eyes to the state of things in Europe and the most advanced countries of the world. But when we come to the latter portion of the instructions we find a condemnation of translation and grammar.

THE REFORM IN PRACTICE.

In practice, the negative part of the instructions was readily enforced with the result that translation and grammar disappeared totally from the English lesson. Translation ceased as an item of instruction in the class-room, in the time-tables and note-books and was completely expunged from all examinations. A regular crusade was carried against translation and grammar. Very likely those who had to handle the subject in the class-room, at least most of them, must have felt uneasy under the change and found it difficult to work on the new lines. Of course, reformers made occasional raids into the class-room from some Alpine or Himalayan heights with some set hackneyed model lessons and left the rest to be worked out by the teacher. If, in the course of teaching, difficulties were pointed out, they were attributed to the incapacity of the teachers; and if results were poor the charge was laid again at the door of the teacher. Matters came to such a pass that it is sedition, if not sacrilege, to speak

some good out of the joint efforts of the two systems, whether in rivalry or in combination, and that some tangible, efficient, scientific method would evolve out of the joint efforts of the two systems. In the light of these instructions the addition seemed but the dawn of a brighter day for English instruction in our schools, and educationists in our country had good reason to count upon it as the fore-runner of some tangible improvements in English instruction. Then began the publication of books incorporating the principles of the two diverging schools of linguistic teaching, some based on conversation and oral composition and the others on systematic translation. But here came the change like a hurricane. The working of the joint instructions was destined to breathe its last ere it passed five years of experimentation. The old system came to an end in 1905, when what seemed but the fore-runner of a moderate reform proved but the seed of a revolution sweeping everything before it.

THE PRESENT DAY INSTRUCTIONS.

In 1906 appeared the departmental 'Hints and Suggestions' containing novel instructions to supersede the old instructions for English instruction. The following extracts on methods of teaching English indicate the changes recommended:—

(1) "Those methods which make least use of translation are likely to produce the best results."

(2) "In the reading lessons, from the earliest stages, translation should be avoided as far as possible. At most translation of a word or phrase here or there is necessary."

(3) "It is suggested that, for the first two or three years no formal grammar need be attempted."

(4) "In the suggestions made above translation has been reduced to a minimum: not only does continual translation retard, if it does not prevent, ease of expression in the foreign tongue and on the other of foreign idioms vitiating the mother-speech.....But it is suggested that, except for momentary and limited use in explanation, translation should be eliminated from the first four years of English study."

word in favour of translation; and he that does it is an object of ridicule, if not censure; he is either antiquated or incompetent. On the other hand, it is an accomplishment to decry translation and extol its rival; those that are recognised as making earnest efforts to follow the new method are alone up-to-date and competent. These for playing second fiddle have all profit and glory; while the resentment of those others brought them no more than shame and damnation. These two classes form but a small minority. As for the rest who form the masses, they can be classified under different heads like the sullen yielded, who are more general than the others, the selfish converts, the careless neutrals, the serene sceptics and the reckless optimists.

HEALTHY COMPETITION.

In these circumstances free discussion is out of the question; as for healthy competition between the rival systems there was left no chance; because, in the first place, the old order was swept away leaving no scope for comparisons; secondly, those who enforced the reform were above the reach of the class-room to work there; thirdly, the reform principles are, as Cæsar's wife, above suspicion; fourthly, if results are unsatisfactory, there is somebody else to bear the shame, and fifthly, the opposite side did not deserve so much as a hearing, not to speak of a trial. Guardians alike must have had serious misgivings; but the opinions of lay men count for nothing in the light of scientific advances and technicalities which are the monopoly of a few experts. What has resulted from a change brought about in this fashion has been revealed by statistics. Opinions may yet differ. If there be any who believe that our students are making satisfactory progress under the new system of English instruction and nothing more needs be done than allowing the present state of things to continue, I can have nothing to say to them. If, however, there are any who agree with me in thinking that the changes have driven the pupils, as the statistics have revealed, from the frying pan into the fire or at least that it has not improved the system, this article is meant for them.

THE TRANSITORY STAGE OF THE NEW METHOD.

One way in which the imperfect results of the present system are accounted for is by saying that the reform method is in its experimental stage, and linguistic methods, just as the whole educational system, are in a transitional condition. This is, of course, a sensible explanation and offers a fertile field for discussion. Now, the initiation of the reform method was characterised by vehement opposition to translation and grammar as being baneful to the acquisition of English. Let us, for a moment, examine the consensus of opinion on these assumptions and how they are looked upon abroad.

(1) Karl Breul, England, says: "The true method has not, as yet, been discovered either in England or abroad," and that the reader on the reform lines has not yet appeared.

(2) Prof. A. Lodeman, Michigan State Normal School, says: "The actual number of methods of teaching modern languages, it would seem, must be legion. But in all the literature of this class, we do not find the true answer to our question: 'How should we teach the modern languages?'"

(3) Prof. Edward S. Joynes, University of South Carolina, says: "For college or school work the natural method is a delusion and a snare. Who among us has not witnessed the helplessness of pupils trained by this method for all literary or higher linguistic work."

(4) Otto Scipman, England, says: "I need not repeat here the dangers that arise when we try to avoid the mother-tongue."

(5) Prof. H. C. G. Von Jageman, Harvard University, says: "The natural method deprives the student of one of the most useful instruments for learning a foreign language, viz., his mother-tongue. It would seem distinctly unnatural if he did not make use of the mother-tongue. In fact, it would be quite impossible."

(6) To come nearer home, the Occasional Reports, Vol. IV, pointed out that the direct

method which is of European invention was not accepted by all parties there, that in the very land of its origin it could not convince the opponents, that the old method is adopted by an equally large number.*

THE UNFOUNDED CONFIDENCE.

I should now like to know how, in the light of statements like these, we were right in thinking of the new method as the only sure and correct way to linguistic acquisition. If the reform method with its condemnation of translation and grammar were a theory convincing to all and unopposed by any, like the rotundity of the earth or its annual revolution round the sun, it is impossible for such divergence of opinion to exist. The two theories now receive such universal acceptance that we do not find even a single disbeliever in them; and the beauty of it is that, discovered as they were some centuries back, every physical phenomenon finds explanation in the two theories which is ample proof for their correctness. This ever increasing confidence has stood all test and remained unshaken. But in the case of the new method, with its condemnation of translation and grammar, we see not only its failure to convince all parties, but also, from the very beginning of its inception, a tendency to give place to translation and grammar. If the theory were well-founded, I should like to ask what child, in its natural course of acquiring the mother-tongue, ever had or could have explained the native words and sentences in another language. Did he ever require any grammatical knowledge to express himself correctly? Do we not notice the illiterate masses expressing their ideas correctly and understanding others easily without once in their lives having occasion to hear the grammatical terminology and rules? If the reform method,

founded upon an analogy with the method by which children acquire their mother-tongue, were a truism which none has a right to question and all are bound to adopt, how can we justify the partial or as it is sometimes styled tentative and exceptional use of the vernacular and the resort to grammar and its paradigms which no writer on linguistic methods has yet succeeded in avoiding? Four series of readers on reform lines have appeared in India since the reform was set on foot; not one of them is above this contradiction. They all invariably denounce the use of the vernacular and grammar in the most vehement terms. One series, in the first pages of the first book, condemns translation, and towards the end of the second book gives directions like 'we cannot do away with translation, every sentence must be translated;' and similar statements do occur with regard to grammar. Such contradictory statements are indeed very skilfully kept asunder but the fact cannot be hidden from those who go through the series with eyes open. Another writer directs the teacher to 'explain in the vernacular' at every step of procedure, while denouncing the use of the vernacular as the chief tenet of his scheme of instruction. Why, for the matter of that, even Jespersen, our authority on linguistic methods, is not above this contradiction. More of his work separately in the next article. For the present it may be safely asserted that from Jespersen's series down to the latest readers that have appeared in India, not one has succeeded in furnishing a scheme consistent with the fundamentals of the reform; and what is termed natural method in its purity is merely imaginary; it exists nowhere, not in India, not in Europe. We thus see that each and every advocate of the new method breaks his faith with its fundamental tenets. Can we not from these considerations conclude that the principle underlying the reform method of teaching languages is not a theory either accepted or acceptable, either

* For more and ample quotations, the readers are referred to the numbers of *Indian Education* for March and June 1914.

worked or workable? Those who have followed the discussions in the *Modern Language Teaching* and the *School World* cannot be unaware of the fact that the unqualified exclusion of translation and grammar is an antiquated view not advocated either in theory or in practice in any civilised country of the world. Not caring to look into all this, when the whole world is sceptical about both the validity and the efficiency of the modern linguistic methods we adopted it. It is no more than a leap in the dark; if, however the step had thrown us on a bed of roses, no matter, we can afford to laugh over our recklessness. But statistics have revealed that, instead of falling on a bed of roses, we have fallen into a mire, a mire neck-deep; what divine hand will come to our succour, help us out, give us a washing—also a drubbing for our folly—and put us on the right road to English instruction, only Heaven should know.

METHODS IN THE EXPERIMENTAL STAGE.

When we say that a method is in its experimental stage it may mean one or more of the following:—

- (1) The conditions requisite for its success are yet to be formulated.
- (2) The text-books, apparatus and appliances needed for its adoption have yet to be devised.
- (3) Their efficiency is not yet an established fact.
- (4) More preparation is yet needed to make it efficient.
- (5) Teachers have yet to grow wiser to handle it successfully, &c., &c.

When all these requisites are satisfied the method has every right to be adopted and forced upon all schools. Advocates of the new method invariably say that it is workable only in very small classes, say of six or eight; that teachers capable of handling the direct method are not born everywhere, which amounts to saying that any and every teacher cannot do justice to his task with the direct method; that the suitable reader

is yet to be written. Not caring for any of these precautions the direct method was thrust upon Indian schools. The method was first introduced; then began the preparation of text-books; other things were disregarded. What it can do we can easily surmise and the statistics have richly justified our expectation.

EXPERIMENTATION.

The right course to follow in the case of experimental methods would be to confine them to special institutions, say the training institutions; have the experiments conducted there; ascertain the conditions requisite for their adoption; get suitable text-books, apparatus and appliances prepared; work them out for a time watching the results; and when we are satisfied with them in all these respects, then extend their adoption to schools in general. Meanwhile let the other schools be free to work according to their own rational schemes without hampering their progress by unwarranted prohibitions, restrictions and limitations. Of course the aims and the particular kind of result expected may be specified; but as regards the means, it would be wise in this transitional stage to leave them to the option of the teachers. A procedure and policy like this will enable the growth and perfection of some rational and at the same time efficient method; and that which is fittest would naturally survive.

PROMISES OF REFORMERS.

The defective results of the new method are attributed to its transitional condition and any criticism of it on this score is warded off by saying that it is yet in the boiling-pot. As for the occasional or rather the exceptional use of the vernacular and grammar, they say that in our present state of ignorance we are not yet able to devise the means to dispense with them altogether and that the unmixed natural method is still in the womb of time to be revealed by further experience. In some such strain the admirers seem to be inclined to explain away the weak-

ness of the new method, and are not disposed to own the invalidity of their assumptions, as the opponents have their own reasons to urge. It is outside the province of this article to enter into a discussion as to the validity of these assumptions. Let us therefore for a moment pause to look at the foreign school, the weight of the opposite side, and compare the conditions there with the present system in India.

THE OPPOSITE SIDE.

If we care to hear the opposite side and feel the slightest inclination to give any credit to the opinions expressed by representative men in England and America, we find already conclusive proofs that the direct method is a failure; that its tenets are ill-founded, that the abandonment of translation and grammar are more harmful than beneficial, that the latter are indispensable in foreign language teaching, and so forth. Though these proofs may not be convincing to the advocates one thing is certain, there is, at least a strong body of opinion in favour of translation and grammar, opinions ranging between the most orthodox insistence and the most rabid denunciation. Let us, in these circumstances, pause to see what the English school is now doing.

THE ENGLISH SCHOOL.

It was in the nineties that the agitation for the direct method began in England. Along with its introduction and in the first decade of the present century there began a reaction. The following quotation from the *School World* for December 1905 shows the gist of public opinion on the direct method:—

"Inspectors declare boys trained on the new lines to be quite incapable of translating books suitable to their age, while, in former days, boys taught on rational system by a master who knew his subject and delighted in his work, were able to translate unseens into English."

"Reformers are not agreed on the following points:—

(1) To what extent translation, grammar and exercises may be permitted, if at all.

(2) Whether the grammars and the teaching generally should be in the mother-tongue.

(3) Whether a dictionary should be allowed and, if it is allowed, in what language it should be."

The quotation casts some light on the doubts at least some English educationists entertained about the direct method. The paper read at Clifton by Otto Siepmann is one of the many articles that marked the growing opposition to the new method. As a result of all this reaction, we find an innovation in England. Translation was allowed to be used as an alternative method in some sections, and separate papers were set at examinations for these sections. We thus see that the English school of the present century came to adopt a more moderate policy with regard to translation. The old opposition to it has faded in England as may be noticed in the discussions that have appeared in the *Modern Language Teaching*. It remains for us to see how the rival systems will work in England and adjust their differences. We can fairly expect some golden mean to emerge from the several and joint efforts of the rival systems. The English school has already retraced half-way but our Indian school is lagging behind with its nineteenth century superstitions. Here, permit me to point out that the present day policy in England resembles mostly the old school attitude in India at the beginning of the present century, the difference being only one of degree: while England to-day works the two systems in separation, we have seen that the old system in our province began to work them in combination.

THE BACKWARDNESS OF THE INDIAN SCHOOL.

When we look into the departmental regulations issued in our province they seem to direct our view to the progress of linguistic methods in Europe and follow in their foot-steps for the improvement of English instruction in Indian

STUDIES FROM A KINDERGARTEN WINDOW.

IV.

THE EXACT SCOPE OF FROEBEL'S GIFTS IN THE EDUCATIONAL TRAINING OF THE KINDERGARTEN.

AN obvious preparation to deal with educational theory in the Kindergarten is to be familiar with child-character. There is a good deal of a description of this in a scientific manner in works of modern educational psychology. But to the live teacher a more fruitful source of information lies in the experience of concrete examples, and even if the circumstances of his life do not bring him in intimate contact with children, there is a great deal to be gained by a strenuous effort to recollect as far as he could what he knew to be true in his own life in his infancy and childhood.

Before considering the peculiar value that the well-known gifts of Froebel bear in the Kindergarten, the present writer will now recall some of his earliest experiences in life, which bear relevancy to the subject of this paper and a reflection on which helps him to a comprehension of the basic principles of the "Gifts."

He had an insatiable longing to *do* things. Anything that came in his way which occasioned motion and activity for his limbs was welcome to him. The concrete objects of the world which lay around him before his eyes gained attention from him. He had no mental moods and no consciousness of feelings, or emotions or passions of any strong or lasting character. He devoted himself with an absolutely astounding earnestness to the *doings* in which he was engaged and to the objects which affected his physical senses.

The scissors had a great fascination for him,

schools. But the practice in our schools is as we have seen, not in keeping with the progress of things in England. For when there was already a reaction against the direct method in England even before 1905, we adopted it in 1906 without a thought and abandoned the old system with the same indecent haste that characterised the agitation in England during the preceding decade. Again, while during the first decade of our century English schools moderated their policy by permitting the use of translation as an alternative method in some sections of their forms, Indian schools still persist in their initial exuberance and do not care to consider the question. The present attitude of Indian schools with regard to English instruction seems to be but a happy composedness in the satisfaction that what is desirable had been accomplished a decade back; they set the wheel going and the machine would work on; we need no more trouble our brains with it. If the results, as revealed by the statistical review are satisfactory and if anything better should be deemed a superfluity or, as some may think, an impossibility, then I do not like to disturb the tranquillity of such of my colleagues. If, in the interests of thousands of learners, they think it worth while to hope and strive for something better, let them turn their thoughts to the theoretical foundations and practical workings of the present system in the light of the harvest we are reaping under it and with the special view to promote the tone of English instruction in our schools by devising, if possible, a more rational, more practical and more efficient scheme of English instruction.

CH. V. JOGARAO.

In them he saw the agent of neatness and exactness of physical form. He had observed the servant at home making numberless envelopes, all of a size and accurate in their dimensions. He was filled with a desire to handle that instrument under whose touch the monotonous plain sheet of paper could transform itself into the intricate envelope with its edges and semi-circular curves. Probably in response to his clamouring he has been given a large sheet of old newspaper to indulge his cutting. He applies himself for sometime to cutting it but soon he longs to deal with some different stuff. The printed matter which distributes itself at random on the newspapers is not without lending a clumsy background to the products of his scissoring. He feels that his circular or oblongular bits of paper would show a better finish, in a purity of whiteness in colour. And sometime later he feels he might advance his activities by observing the effect of cutting paper of different colours.

For many years of his childhood he lived in a town which was on the banks of a river, full of sand, with little rills running in it which became swollen into floods at some brief period in the year. He used to be taken to the sands in the evenings for walks. At those times it was a fascinating occupation for him to do different kinds of construction in the half-wet sand. Even as the adult man might feel proud of the complicated comforts of his home, where the work of his hands shelters him from the inhospitable roof of the universe, the little boy felt proud of the concealed privacy of the sand-home he had scooped out in the sand. His sense of touch was wonderfully exercised. He knew the exact point at which the sand could be manipulated to adhere together in balls

or stand as walls to the little home of his construction.

Another event of his childhood was almost due to accident. A lady friend of his parent gave him a present. It was a box of twelve cubical pieces of wood. The cubes were covered with paper on which the pictures of six animals were printed in colour. The six sides of the cubes made each, when put together, the picture of an animal. It was his endless and charming task to arrange successively the cubes to form the pictures of the several animals. The forming of the pictures in glazed colours was all the diversion the lady, the donor of the gift had intended for him. But the cubes possessed for him another interest still. As cubes, he saw their constructive value and built frequently with them. He made pyramids, arches, and gateways of them. They supplied him material for endless construction work.

The recollection of these facts helps the present writer to infer for himself the truth of the basic principles of the Kindergarten in general and of Froebel's gifts in special. The events narrated above were purely accidental in occurrence and still stood very prominently in the young boy's vision of the world. On further reflection he is put in remembrance of the endless, unsatisfied cravings of his boyhood. It is said that the life of man at any stage is happy only in recollection. The struggle of the present hour is the most distressing aspect of human life, and the fallacy is most often committed of entirely ignoring this when characterising a past period of life as happy or gay. Though brought up in a very "happy home" as the standard in the judgment of the world would imply, the present writer must own to a deep discontent and unsatisfied longings which

colored his childhood. The distressing tale of his being refused scissors to cut paper and fill the house with rubbish was perhaps typical of his discontent. He continually longed to *know* and when his prying questions ceased to be answered, he was disappointed. Still there were many things which he saw were accomplished by his far elders in age which he could not hope to attempt to do at all. He had to give himself to pathetic resignation to do things all "in his own time." More than all this unsatisfied longing, child as he was, he was overtaken with a dreadful *ennui* when his hands were engaged in nothing. He was a baby, or a child or at best a little boy and he must sit quiet as a good boy ought to. Wicked indeed has been the world since the time when a quiet boy was held to be a good boy. With no regular programme of play or of fun for the day, and looking for amusement at every passing monkey-dancer, soothsaying gipsy, snake-charmer or juggler, his life was certainly not full in all its hours.

The golden mean for educational theory in the Kindergarten is firstly in the organisation of excellent occupations for children in it, while it is still not a hospital with all the burden of the care of the child thrown exclusively upon it; and secondly in the child remaining in freedom to derive the benefit of its parental home—to allow scope for its self-educative faculty amidst the humanising influences of its own home.

The most concrete and effective answer to the first requirement is in Froebel's idea of the Kindergarten and as a corollary to it in his "gifts."

They are seven in number. Among themselves they subserve a psychological series beginning with the most simple and leading up gradually to the more and more complex

with a corresponding increase in their knowledge-giving value. The first thing about the gifts is the profundity of their significance. They offer scope for a whole series of correlated exercises of the senses. They concern the training of the senses from a very early stage of infancy and the earlier gifts will be found to be out of place in schools where children are pretty advanced in age when they start in school.

The first gift consists of six coloured balls, the second of a ball, a cube and a cylinder. These two are elementary and while offering even in their simplicity a training in the many senses do not offer much scope for constructive work on the part of the child. This is offered in the third gift which consists of eight cubes which together form a four-inch cube. It is wonderful to observe what a variety of forms these cubes enable the child to construct. In this connection it must be remembered that the child is devoted in great earnestness to the make-believe. He is quite at home in "acting a part" and in things acting parts and he seriously heeds to such things. It is as fascinating for the child to see a Town Hall made out of the eight cubes as to make a simple arch out of them. The cubes forming one whole when put together and still being divided into eight cubes satisfy the instinct for investigation in the child. We are only too well aware of how much the child is filled with this instinct. We can all remember how much a watch or clock filled us in childhood with the mystery of its construction and how often we had wished to get to the heart of it, when our elders wrested it from us for fear of its being broken to pieces. The fourth gift which consists of oblong instead of square cubes is an advance on the last gift, while being similar to in it

its value and usefulness. The fifth gift consists also of cubes but some of them are divided vertically into halves and some others diagonally. This increases their facility for building purposes and offers excellent scope for the instruction of geometrical terms and figures. The sixth gift consisting of twenty-seven oblongs follows the fifth gift as the fourth followed the third. The seventh gift is quite distinct from the others and shows a definite advance upon them. "This gift helps the child to make a picture of things while the others were for making the objects themselves. It is an excellent preparation for drawing, paper-weaving and geometry. It consists of five boxes of tablets made of wood and painted in different colours.

The gifts do not end here. All the material which is needed for the various Kindergarten occupations are rightly gifts. Sticks for laying figures, rings for the same purpose, paper and scissors for cutting, cane or palm leaves for weaving and clay for modelling are all true gifts for the Kindergarten. But the essential significance of all of these is clear.

Having so far touched on their character we have to make a concluding remark on their place in the Kindergarten. In that imaginary parish of which Sir Roger de Coverley was the leading member, Addison tells us that the modest parish priest was instructed to get up by heart the sermons of the most reputed divines to be delivered for the benefit of Sir Roger's parish. There was much soundness in this custom in that the parish obtained through their priest the benefit of the wisdom of the greatest prelates of the kingdom. But the priest that thus reproduces what had been given by another must practise his art with great care. A sermon has no effect if it has not the strength

of deep conviction and deep earnestness behind it. A show of both of these is imperative on the part of the priest. Similarly then are the gifts placed in the Kindergarten. The Kindergarten is essentially the place of "free-play" and this has to be directed by the genius of the Kindergarten. But all Kindergarteners have no intuitive imagination to devise themselves the occupations of the Kindergarten even as every parish priest cannot have brains to be able to deliver an impressive sermon. It is to guide them that the gifts have a lasting value. Their significance must be properly studied and assimilated to enable the average Kindergarten to run with success a Kindergarten. The gifts are all suited to peculiar stages of childhood and by a proper understanding of children's capacity, the use of the gifts must not on the one hand be made to strike the child as stupidly simple and on the other as too intricate and ingenious.

P. R. KRISHNASWAMI.

IN THE PRESS.

SIXTEENTH AND REVISED EDITION
OF THE

LOWER SECONDARY ARITHMETIC

BY

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SRINIVASA VARADACHARI & CO.

Triplicane, Madras.

THE TEACHING OF CHEMISTRY IN THE HIGH SCHOOL.*

THE value of the teaching of Chemistry cannot be over-estimated. In addition to its educational value, Chemistry is a science of supreme importance in its applications to arts and industries. Chemistry is a fundamental science and other branches of knowledge, which contribute to the well-being and material prosperity of man, borrow largely and profitably from it. Besides its usefulness, it is a very interesting science.

As this is a purely experimental science, a knowledge of it is best acquired not by listening to a course of lectures but by the performance of a series of well-devised experiments covering the course to be studied. The hand as well as the intellect are well exercised. Since at first the pupil has only to carry on experiments planned by others, he is required to read and understand the instructions given with due obedience, faith and attention. Next, he has to set up apparatus and start the experiment. It is here that his skill in manipulation and resource in accommodating himself to the limitations of his laboratory, are brought into play and kept constantly occupied. He has to watch the results. His powers of observation are developed and trained. Frequently he has to face failure. After all the trouble he takes, the result is not what it ought to be. He does not know what it should be. The teacher who knows his work, does not directly show the pupil his mistake but puts a series of questions leading him to detect his fault. Sometimes the student has to perform new experiments to answer these questions. His curiosity to know the right result, coupled with the fear of being reckoned inferior to his fellows who luckily got success in the first attempt, stimulates him to work. Patiently he does the

further work prescribed by his teacher and to his great pleasure and satisfaction, he secures success. He forgets all his trouble and anxiety and is occupied with the one thought of showing himself at best, excelling all his fellows in the next experiment. Thus the result of previous work engenders and sustains interest in the further study of the subject—success encouraging him in his work and failure hardening him in his determination to achieve the coveted result. Having noted the results of his experiments, he has to bring together all similar phenomena and draw generalisations. The facts thus laboriously arrived at, are to be retained for further use. Deductions suggest themselves to him. He has to devise and carry out well-thought-out experiments for their verification. He stands independently handling and examining Nature; he opens out for himself new fields of research and adds to man's knowledge of the mysteries of Nature. No one fails to see the educative value of such a course of study. The young pupil learns to be obedient, patient and cleanly. His powers of observation are highly developed. He becomes resourceful and self-reliant. There will be a well-balanced development of memory and intellect. The training which the pupil receives throughout in the study of this subject will not fail to stand him in good stead in after-life. He observes events carefully, appraises them at their proper value, quickly devises plans and speedily translates them into action to meet emergencies. He understands quickly and correctly, endures patiently, and acts promptly. He learns to use his judgment with caution and circumspection.

Again, the industrial development of a country is closely associated with the spread of a knowledge of chemistry. The glass industry, the manufacture of sugar, indigo, paper, matches and soap, the preparation of all chemicals and medicines, metallurgy—all these require the employment of specialists in the various branches of Chemistry. India little dreamt that her indigo industry would pass out of her hands and that the science of chemistry would

favour its votaries with the discovery of a method of obtaining it from coal. The history of the foremost countries of the world abounds in illustrations of the dependence of the prosperity of a country on the progress of a knowledge of chemistry. The great war in which the world is engaged, demonstrates the value of chemistry and the importance of the application of its principles. Eminent scientists in England deplore the neglect of science in their schools and colleges. We are now made to realise fully the value of chemistry. We cannot get even a yard of cloth coloured fast; medicines, chemicals and metal-ware have their prices trebled and quadrupled. India, depending upon the foreign manufacturer for the supply of its daily needs, has suffered doubly. There is no market for its raw produce, while the cost of the finished article has risen enormously. Japan with its foresight, improved its education, developed its industries and is reaping the fruit by flooding our markets with its goods.

Even agriculture which is put down to be the primary occupation of our country, has much benefit to derive from a knowledge of chemistry. The selection of the crop to suit the soil, the strengthening of soil by the addition of the right kind of manure, the rotation of crops to obtain the maximum yield from the plant, the tending of cattle necessary for agricultural operations, and the best way of preserving and using the produce—all these require a knowledge of chemical facts.

The study of hygiene, medicine, and engineering presupposes a knowledge of chemistry. Careers in these are open only to those who take up chemistry in their school course. For the proper understanding of sanitary principles and for fighting the insanitation of our growing towns and cities, a knowledge of chemistry is of utmost importance. Gentlemen, whichever side you turn, you meet with such a host of applications of chemistry that you are forced to conclude that ignorance of chemistry means the ignorance of many things about us.

XXIII

Now, since the study of chemistry is of utmost importance for the real progress of the country, the next question to be solved is how the necessary amount of instruction can best be given. It is sometimes said that the Indian mind is not fashioned to receive scientific training, being accustomed to philosophical discussions of abstract and abstruse subjects. I would answer by pointing out that the skill of the Indian artisan is not excelled even in the 20th century and that philosophy is not without its use in physical sciences. Without the play of imagination, the progress of chemistry would have been next to nothing. What are all the productive theories of chemistry, if they are not admirable feats of imagination? Further as positive proof of the capacity of the Indian mind, I would mention with pride the names of Dr. Bose, Dr. Roy, and Mr. C. V. Raman of our Presidency. The results of their research are far reaching and have arrested the attention of the foremost scientists of the world. The work done is not of the kind of slavish imitation likely to be forgotten soon. It is original and revolutionising. It may be contended that progress is slow and such men are few and far between. Considering the absence of facilities and the lack of capable and sympathetic men for giving us the right kind of training, the rate of progress is a matter for congratulation. The amount of work done in Chemistry in the Secondary School in our country, does not compare favourably with that turned out in other countries. The standard in Chemistry required for the Matriculation Examination elsewhere, is much higher than that of our own. To bring ourselves up is our imperative duty. The cause of the backwardness is not at all the inherent incapacity of our boys to grasp and practise the facts of chemistry. The system of education followed in this country is mainly to blame. Improve the system and the progress will be rapid. In support of my statement that our boys are not the cause, let me recount to you my experience with them in the

* A paper read by Mr. G. Sambamoorthy, B.A., L.T., Assistant Professor, The Presidency College, at a meeting of the Mathematics and Science Section, Madras Teachers' Guild, on Monday the 5th of March 1917, with Mr. H. O. Kershaw, M.A., in the chair.

High School. During the summer of 1907, a conference of teachers was held at Vizagapatam. The best feature of the conference was the exhibition of school-work in different subjects. Among the exhibits were the exercises in Physics and Chemistry of pupils (ages varying from 11 to 13) of the London County Council Schools. The exercises included among others, the estimation of copper in copper sulphate, of water of crystallisation in crystallised salts and the determination of the equivalent weights of zinc, magnesium and carbon. When I looked into these exercises, I thought that such work might be done in our schools as well. I was then possessed by a strong desire to introduce practical work in the High School classes at the Government Training College, Rajahmundry; for I believed that our boys also, if given the opportunities and facilities, would be able to do as much as the pupils whose work was exhibited. There were two halls, 36 x 35 feet each. I submitted a proposal to the Principal for fitting up a laboratory for practical work with tables and water supply at a cost of Rs. 2,500 to accommodate 40 boys at a time. Mr. Mark Hunter, the then Principal, kindly got the amount sanctioned and made my experiment possible. No doubt we had to contend against many odd difficulties, incidental to a first venture of its kind. Makeshifts had to be devised. Balances had to be multiplied; a number of wooden balances was made after the model of the one described in Newth's "Chemical Lecture Experiments." With the apparatus and chemicals available and with other requirements improvised, practical work was started for all the forms of the High School Department in both Physics and Chemistry. The results achieved at the end of the year were surprising. Students took to work eagerly and looked forward with pleasure for the day of practical work. At first they had it once in the week for two consecutive hours. In Chemistry they prepared for themselves several gases and studied their properties by doing suitable experiments with them. They could do quantitative

work from which the laws of chemical combination could be deduced. They prepared pure crystallised specimens of salts and determined the water of crystallisation in them. Among others, they prepared lead nitrate, ferric oxide, lead chloride, lead iodide, sodium chloride, sodium bisulphate, sodium sulphate, potassium nitrate, potassium chlorate, and caustic potash. They determined the equivalent weights of magnesium, zinc and iron. In Physics too, good progress was made. The specific gravity of solids and liquids could be found with ease. A comparison of the specific heats of different substances was made. The latent heat of steam was determined, the water equivalent of the calorimeter being first ascertained. In light, the laws of reflection were verified. The properties of images produced by concave mirrors and double convex lenses were studied. The microscope and the telescope were readily arranged with lenses supplied. Simple qualitative experiments in electricity and magnetism were performed by students. They soon learned the use of the calipers, the spherometer and the micrometer screw gauge.

In 1909 I had to leave the Training College for work at the Arts College and those students that had been trained up by me in the High School, came up for the Intermediate class. They appeared for the First Intermediate Examination in 1911 and all of them passed with distinction in both Physics and Chemistry. Most of them have passed the Honours Examination in various subjects and are now lecturers in first-grade colleges. From the results of this experiment, I am quite convinced that the fault does not rest with our pupils. Now, gentlemen, you must have come to the same conclusion from your experience with boys. If then we accept that our pupils are not to blame, it becomes our imperative duty to trace and root out the causes that have been so far retarding progress. Gentlemen, I submit for your consideration the following suggestions which, I make bold to say, will go a long way to effect improvement,

1. The laboratories attached to the High Schools must be improved and multiplied. Unless the laboratories are well furnished and steps taken to maintain them always in a condition of efficiency, the student will not have all the requirements necessary for a proper study of the subject. We reap what we sow. It is ridiculous to expect our boys to have ideas of things and processes without their seeing them even once. They should not be left to imagine the apparatus necessary for an experiment and asked to draw conclusions from results which are, in their turn, taken to be granted. Again the diagram on the board is not and cannot be a substitute for the actual concrete apparatus which the student should handle and set up. So long as we do not improve our laboratories, the condition of the teaching of Chemistry in our schools and colleges is bound to be deplorable. The first requisite for learning swimming is water; without first getting into water, one cannot learn swimming by listening to lectures on swimming. Every chemical laboratory must have gas and water supply, besides being well furnished. There must be provision for a recurring expenditure on chemicals and apparatus. Here a heavy responsibility devolves on science masters; every attempt should be made to prevent waste and to turn every pie spent over the laboratory to the best account.

2. There must be increase in staff and the increase should be proportionate to the number of pupils doing practical work at a time. The practice of having one science master for the whole school, should be discontinued, if it still exists. Students must receive individual attention, while engaged in practical work. The habits acquired in the beginning, last through life and shape future work. Both the quality and quantity of work turned out in a college, entirely depend upon the work in the High School. It is in the High School that the future research student has to be trained. The total number of hours during which a teacher is engaged in actual teaching, should not exceed twelve a week. Besides the regular class-work,

the teacher in charge of a laboratory has to do a great deal to maintain it in an efficient condition.

3. The teacher of science must recognise that he must always be a student. Of course this is true of every teacher. The more so is the case with the science teacher, for at present he is required to effect a change in the system of teaching. The system he has to follow, is entirely different from the one under which he was trained. He has to adapt himself to the new requirements. The response so far made by him, is admirable as evidenced by the success which the School Final scheme has achieved.

4. To secure a higher standard of teaching of Chemistry in the High School, Elementary Science should begin early in the Primary standards and cease with the III Form, leaving the remaining three years of the High School course to be devoted to a higher study of the subject. It is quite essential in the Secondary department to keep Chemistry, Physics and Mathematics on an equal footing. To effect this, we must work slowly with existing conditions. We must allow time to permit more institutions to equip themselves for the teaching of both Chemistry and Physics as optional subjects; meanwhile something must be done to enable pupils taking up one of these subjects to acquire an adequate knowledge of the other. The total ignorance of one of the subjects, as it now obtains, is not conducive to the growth of a correct scientific spirit, and to the pursuit of higher studies in the collegiate department. Everyone in charge of the Chemistry of the Intermediate classes is convinced of the difficulties of having in the class some boys who did Chemistry in the High Schools, mixed up with others who did not do any chemistry at all. Some are forward, while others lag behind. To set right matters, the teaching of Elementary Science among the B group subjects, must receive greater attention. There also the teaching should be made practical.

5. The method of teaching Chemistry now,

compared with that prevailing ten or fifteen years ago, no doubt shows marked improvement. The old plan of boys listening to lectures sitting on the gallery and curiously looking on an odd experiment which an enthusiastic master occasionally exhibited, has given place to a method in which the principle that the student must learn for himself, is well recognised. According to the old system, practical work in Chemistry meant only a number of experiments with the test-tube leading to qualitative analysis.

I propose a further extension of the principle now followed and suggest that the subject should be learnt solely from experiments performed by the student himself. We should not permit him to learn facts first and to perform a few experiments to verify some of the facts learnt. The student should be made to attach more value to his laboratory note-book. It should form his text-book on Chemistry containing descriptions of experiments performed, observations made and generalisations drawn. For purposes of revision, the note-book written out fairly, should be relied on. "The vast majority of children" says Professor Armstrong, "naturally like the method of experiment; and it is our system of education that is mainly responsible for the decay of the taste with advancing years." I have heard it said that the failures in Chemistry in the Intermediate Examination are due to following the method adopted in Smith and Hall's "Laboratory Outlines"—a book recommended by the University and used in almost all the institutions. The alleged fault of the book is that "it is logical in its treatment." This was explained to mean that it was written on the plan that the student should learn the subject directly by observing the results of experiments made by himself. The book gives detailed instructions for carrying out the experiments; puts questions directing the attention of the pupils to the results to be noted and thus helps him to draw proper conclusions. I assert, gentlemen, that this feature is not the defect but the merit of

the book. The book adopts the natural method of experiment and condemns that of verification. To remedy the alleged defect, it has been suggested by the same authority that a list of some select experiments should be made on the lines of the programme of practical work in Physics prescribed by the University for the Intermediate Examination. I would ask if by performing these experiments alone a student would be able to cover the whole course in Physics; if not, the method would be one of first learning facts and then performing a few experiments to verify some of them. As far as chemistry is concerned, the method is quite unsuitable. Chemistry lends itself fully to the method of experiment; and this is the method which cultivates true scientific spirit and creates a genuine desire for research. If the student is to do everything for himself, it may be asked "What is the teacher to do?" To make the pupil do an experiment well, requires considerable tact, resource and above all patience on the part of the teacher. The teacher must always be vigilant and be present by the side of every one of his pupils at work, ready to note and correct mistakes. To get another to do a piece of work is much more difficult and taxing than to do it oneself. In addition to directing the work of the pupils, the teacher must perform some demonstration experiments. He must teach his pupils both by precept and by example. The pupils acquire a good deal of their skill by imitating the teacher.

6. The treatment of subjects, classified under the heads of elements, may well give place to one in which all related processes and facts are grouped together. It need not be artificial. The teacher should be left free to follow any order he chooses. Theory should not be detached from practical work; it is the connective tissue binding all observed facts and should therefore be introduced as occasions arise, giving only so much of it at a time as would create and sustain interest in the facts connected together without unnecessarily straining the imagination. The history of Chemis-

try should not be neglected. Sometimes the chronological order serves best. The concentric system should be followed; in the beginning the work should be mainly qualitative, the manipulative skill and powers of observation being exercised; while later on quantitative work may be taken up. Exercises in glass work, such as tutting, bending, the joining of tubes and the blowing of bulbs, should be set. The pupils should be well-exercised in filtration, precipitation, the washing of precipitates, crystallisation, distillation, etc.,—processes always employed in chemical preparations.

7. The next point which I suggest for your consideration, is more important and far reaching in its consequences than any of the foregoing. Perhaps it may also be one on which opinion is divided. Extend and multiply your laboratories, improve your methods of teaching and increase the staff; yet you cannot have the progress made in other countries, unless you remove the chief cause retarding it. Education must begin at home; this is not possible as long as a foreign tongue continues to be the medium of instruction. The knowledge of any subject cannot reach the masses except through the medium of the vernacular. Our University during its 60 years' existence, has influenced but a fraction of the population. This system again accounts for the inequality between men and women in point of education. We begin to learn language from infancy and take 5 or 6 years to reach the stage at which we understand ordinary conversation. Even at the age of fifteen one is not supposed to have the ability to use polished language—to express himself fully and effectively without offending others. Starting almost with birth, one continues to learn language throughout life. When such is the case with one's own mother-tongue, what time and energy must be spent to gain an adequate command of a foreign language? English is learnt best in an English atmosphere. How can an Indian arrange to place himself in the midst of English surroundings? It is not easy to change the mother-tongue of a people; any such attempt is fraught with very serious consequences. Under the present system an adequate knowledge of a foreign

language should be first secured to receive education in scientific subjects. It is not enough, if the student understands what is taught through English. He must be able to express himself freely in that language; for he is judged not by what he knows but by what he says. Our student has to do up-hill work. He has his energy wasted. He lacks originality. His imperfect knowledge of the foreign language creates in him a tendency to memorise whole passages which he reproduces, when required, like a parrot. All his attempts to master an alien tongue, abandoning the vernacular, run to waste like attempts made to turn the course of a mighty river from the mouth to the source. No doubt some have succeeded marvellously; but that is no reason for asking the generality to perform the same feat. Addressing the Directors of Public Instruction said H. E. the Viceroy, "I would ask you, and I ask myself, as University men, how we should have fared in our education if it had been wholly through the medium of a foreign tongue. I doubt whether we would not have abandoned the attempt in despair; and I am lost in admiration for the grit of those boys who make a gallant attempt to surmount the difficulties imposed on them by a vicious system."

If the vernacular be made the medium of instruction for the teaching of non-language subjects, much time and energy would be saved—which may with advantage be utilised for a better and higher study of these subjects as well as of English as a compulsory language subject. The absence of suitable text-books in the vernacular, may be felt at the outset; but once the demand for them is created, one need not fear that supply will not be forthcoming. This will indirectly give an impetus to the growth of vernacular literature. The percentage of failures at the various public examinations in these subjects, would considerably fall; for it is not so much due to want of knowledge of a particular subject as to an imperfect knowledge of English. "The wonder to me" says Sir Harold Stuart, "is not that so many fail but so many succeed; for the great majority of you have been compelled to receive your education through the medium of a

foreign language." Again the Hon'ble Mr. J. H. Stone, our Director of Public Instruction, is convinced that "progress in non-language subjects in Secondary Schools is largely interfered with and hindered by the very imperfect knowledge of English of the boys that come into them." There can be no doubt whatever, that the Indian student is considerably handicapped by being compelled to receive his education through the medium of English.

I do not want to be understood to say that English ought to be eliminated from the curriculum of studies in the High School. We are very much benefited by our study of that noble language. It brought us into contact with the civilised world and a knowledge of English is quite necessary for us to retain that touch of civilisation. If the vernacular be made the medium of instruction at least for scientific subjects, the progress in these subjects will be rapid and genuine. The way to originality will be paved and time will become available for a better study of English. The knowledge of languages other than the mother-tongue is an accomplishment, while education is a necessity. No language, however well it may be studied, can be a substitute for the mother-tongue, as no nurse, however good and kind she may be, can take the place of a mother.

8. One more suggestion and I am finished. This will not help us directly. Indirectly it is able to secure much good to the teacher and to the taught. The principles to be observed in fixing school time are the following:—

I. *Psychological*:—The tide of nervous energy flows highest in the morning, falls to a minimum at midday and again rises to a maximum in the evening. If this be taken into account, the morning hours must not be neglected. The time on either side of noon is to be rejected.

II. *The climatic conditions of the country*:—In India nights and days are of equal duration. The weather is very pleasant and conducive to work in the mornings till 11 o'clock. From 11 to 2 or 3 P.M., it is very hot. Both the body and the mind feel jaded and require rest. During

the hot months of the year, work becomes a burden and means a very great strain on the system.

III. The customs and habits of the people should go a long way in determining school time. If left free, our children would eat thrice a day—breakfast between 6 and 7, dinner at about 12 noon; and supper at 7 P.M.; the midday meal is the heaviest. It is quite unnecessary for me to dilate on the evils of devouring our food. Knowing the evils of a hurried meal and even suffering from its dire consequences, we are compelled to gulp our dinner. As we are to be at our work at 10 A.M., we are now eating our dinner at 9 A.M.; soon after finishing it, we hurriedly run to our work. Pupils are thus compelled by the present time of work to forego their breakfast, to take their dinner 3 hours earlier and to work with loaded stomachs. It is in the experience of all of you to see students sleeping in the class. It is not their fault. The heavy stomach and the midday sun require them to take rest; but the time-table bids them defy nature, whose laws are inexorable. At a time when boys should grow they are thus obliged to do things which are anything but conducive to growth. The poor physique and the early death of the English educated Indian have become very proverbial. Neither in the morning nor in the evening, we have time left for work outside the school. An alteration of the school-time seems imperative. Taking all the above factors into account, it seems to me to be good to fix school-work from 7 A.M. to 11 A.M., everyday, for six days in the week; this will not curtail the number of hours per week but will at the same time leave the teacher and the taught free for sports and for work outside the school-room.

ACCOUNT OF THE BIRMINGHAM UNIVERSITY.

IN the University of Birmingham, the system of instruction is divided into four Faculties, Science, Arts, Commerce and Medicine. From its foundation great importance has been attached to the scientific side in order that the citizens of Birmingham and of the surrounding districts should be able to obtain a training in the work in which they are engaged; therefore special attention was paid to engineering, mining and metallurgy, as these are the chief industries of the neighbourhood. In engineering there are three chairs, namely, mechanical, civil and electrical engineering; in the University buildings at Bournbrook, now taken over by the military authorities for use as a hospital for wounded soldiers, there are workshops extremely well-fitted up in which the practical part of the training was carried out. In mechanical engineering, the University Power Station, which supplies the whole of the University with lighting, heat and power, constitutes the heat engineering laboratory in which the experimental work on steam and gas engines is carried out. In civil engineering hydraulic laboratories are equipped in the most complete manner for investigating the laws of elasticity and strengths of materials and for experimental work in hydraulics. In this department there is a hydraulic testing machine capable of testing full-sized structural members up to thirty feet length to a load of over 300 tons. It is the biggest testing machine in any of the Universities of Great Britain. Though the course of instruction is slightly longer than in other Universities, the facilities for the training of a Civil Engineer are very much greater. In mining there is an experimental mine, with underground roadways, used for instruction in surveying and ventilation and other work which it would be difficult to carry out in an ordinary working mine. In all these sciences great attention is paid to the practical side as well as to theory; for example, in mining to obtain the diploma every student must have at least two months'

practical experience in a mine each year of his academical course.

In Commerce, a large freedom of choice is allowed in accordance with the interests of individual students; students can combine study in the scientific and technical aspects of the business in which they are interested, with the principles involved in the commercial conduct of such a manufacturing business and with a certain amount of linguistic study; or, on the other hand, it is possible to devote the period of study to the acquirement of a knowledge of foreign languages and to a wide range of economic, financial and administrative studies. Recently the University has made provision for theoretical and practical training in social work; many social welfare workers are needed in factories and elsewhere to advise the workers in these factories, more particularly the women and young persons, and to look after their interests. The importance of this kind of work and its great value, not only to employees but also to employers, has only been fully realised as a result of experiences in the present war.

The interests of students in the University of Birmingham is the special object of the Guild of Undergraduates, of which every matriculated student becomes a member. The Guild elects a committee annually, each Faculty being represented in proportion to the number of students in it. A President of the Guild is also elected annually by the students, and the President, who must be a student, presides over meetings of the Guild and represents the Guild on certain occasions. Through its committee, the Guild of Undergraduates organises (in times of peace) a number of social functions; it also deals with all inter-university undergraduates' business such as the Inter-varsity Debates, one of which is held annually. The University Magazine—the *Mermaid*—is the official organ of the Guild and its finances are controlled by the latter. Every year a pocket diary containing much information about the various students' societies and clubs is published by the Committee of the Guild of Undergraduates.

ates. A Warden of the Guild is elected every three years; his sole duty consists of delivering an address to the students once in his period of office. The present warden is the former Lord Mayor of Birmingham, and present Director-General of National Service, Mr. Neville Chamberlain; the warden preceding him was Dr. Rendell Harris who was on his way to India on the S. S. "City of Birmingham," which was sunk in the Mediterranean Sea.

The various University Societies, the Athletic Clubs and the University Clubs, all elect committees and officers responsible for the conduct of their affairs annually. An editorial board of the 'Mermaid' is also elected annually in the same way. A number of these societies are concerned solely with the studies of their members, and most of the various branches of study have their society. The 'Circle Francais' in the Arts Faculty, the Chemical Society in the Science Faculty, the Commerce Society in the Faculty of Commerce and the Medical Society in the Faculty of Medicine will serve as examples of this class of student societies. Their meetings, as is the case with other societies, are usually held every fortnight or every month during term. The meeting consists usually of a lecture by a student or member of the staff on some topic of particular interest to the members of the society. Sometimes an outside specialist in the studies of the society will be the lecturer for the evening.

A number of other societies are of interest to all faculties and these societies are of great value in bringing all students into contact with one another. The Debating Society, the Literary and Dramatic Society, the Musical Society, the East and West Society, the Fabian Society and the Christian Unions are the most prominent examples of this type of society. An inter-varsity debate, for which the Guild Committee is responsible, is held every year; and a prize debate is organised by the Debating Society in the summer term. The Literary and Dramatic Society produces a play, in normal times, during the session and holds meetings on literary sub-

jects. The East and West Society was organised in order to promote friendship between Oriental and British students. Its meetings usually take the form of social evenings at which some prominent man, either Eastern or Western, gives a short address. Occasionally the Society holds an open meeting when a lecture on some topic of oriental interest is delivered; such a meeting is open to all members of the University whether members of the East and West Society or not. The Principal, Sir Oliver Lodge, is the President of the Society; the Vice-Presidents are Dr. Macmillan, late Principal of Elphinstone College, Bombay, and Prof. Muirhead, LL.D. The Treasurer of the Society is Mr. B. B. Gupta of Calcutta, and one of the members of its committee is Mr. K. A. Huseain of Hyderabad.

Most of the student societies of this latter class, of a more general interest, are containing their activities in war time; of the other class, probably over half have postponed the holding of meetings until after the war. The athletic clubs too in general, are not holding any fixtures at present as the time of their members is occupied in other directions. Most of the men attending the University are members of the University Officers' Training Corps and this involves the devotion of a considerable amount of time to its work. Other students, particularly in the chemical, physical and engineering laboratories are engaged in war work; some, in analytical work, others in research work on subjects of importance at the present time. Many of the women students have devoted a large part of their vacations to arduous agricultural work; in the summer vacation large parties of them were occupied in gathering fruit of various kinds, strawberries, loganberries and raspberries; others in picking peas and beans for market; and yet others were engaged in harvesting. By their work, the farmers were helped in their efforts to increase the production of food to some slight extent, one of the most important requirements at the present time.

F. H. GARNER.

LITERATURE AND SCIENCE IN EDUCATION.

By A. C. BENSON, C.V.O.,

Master of Magdalene College, Cambridge.

There is a very amusing caricature by Mr. Max Beerbohm of the poet Coleridge in his later days, when he lived at Highgate, planned important books in many volumes—not a line of which was ever written—and talked philosophy to all who cared to come and listen. The picture represents Coleridge holding forth in a deep abstraction, with his eyes fixed upon the Absolute, and the guests all asleep—not politely and decorously slumbering, but plunged in a lethargy so profound that they are heaped up against each other, like a bundle of sausages. Such, strange to say, is the sort of effect often produced by those who venture to discourse at large upon education. The strangeness lies in the fact that education is almost the only subject in which almost every man feels himself to be an expert, and claims the right to hold and express an opinion. Yet it is admittedly a dull subject, and, perhaps for that very reason, that all feel equal in discussing it. The expert contemns the amateur, the amateur mistrusts the expert. I myself have had a fairly wide experience of education. I was a public schoolmaster for twenty years, and I have been a Don and College lecturer for twelve more. I have been a diligent member of a County Education Committee for a good many years, and I have sat on every single Sub-Committee at various times. I am on three school-governing bodies, a public school, an urban day school, a county grammar school, and I have been for some time on the governing body of a Teachers' Training College, besides being for a period on the Consultative Committee of the Board of Education. These are my credentials for addressing you; and I may say that I have come to the conclusion that the practice of education is one of the most interesting things

in the world, and the theory of it one of the dullest, for the reason that it reduces itself mainly to very minute and complicated questions of finance.

The fact is that in England we have tackled the matter of education from the administrative side, and, like true-born Britons, we have had a deep suspicion of the philosophy of it. What is the aim of education? That is the one question to which we have never attempted to give an answer. Is it to prepare a man for earth or for heaven? Is it to train the character, or the imagination, or the intellect? Is it to turn out good citizens, or wage-earners, or well-informed men, or practical men, or healthy men, or men of culture, or idealists? What we have certainly contrived to do, without any apparent aim, is to train a generation eminently fitted by devotion and public spirit, and self-sacrifice and bravery, and discipline and cheerfulness, to become in an amazingly short time a generation of excellent soldiers. And in reforming our education it would be worse than childish to overlook that. In spite of all strictures, we have produced the right article at the right moment, and it is a result of which we have every right to be proud.

Personally, I believe that the aim of education is primarily the training of character, and in this respect I believe that we may be said to have succeeded far beyond reasonable expectation or unreasonable hope; and whatever we do to alter our education we must contrive to keep that ethical element. Intellectually, we have not done so well. We have not succeeded in kindling intellectual interest, and I further believe that we have not made the most of our resources of definite technical ability. The framework of a system is all there, but we have not taught the right things, or we have not taught them in the right way; we have not sufficiently developed individual capacity; and I believe that the reason why we have not succeeded here is that we have not sufficiently recognised the difference

of temperament and taste. We have compromised, because we have begun with the notion that it is possible to find a type of education which is applicable to all alike, and what we have called a sound general education has not been a sound one at all, and only general in the sense that it suited no one in particular. It is just as if we had invented a sound general diet by trying to cater for all digestions and appetites, man, woman and child alike, without recognising the vast differences in human nature and the nuances of human inclination.

Every practical educator knows that one can divide one's material into three rough classes. At the top come the people, not very numerous, of strongly-marked individual capacity and ability. These can often deal fairly successfully with a variety of subjects, but there is generally one subject in which they are obviously and specially proficient. I will take the third class next, and these are the people who are clearly

slow and dull, and find great difficulty in applying themselves intelligently to any subject at all. Then there is a much larger second class of fair straightforward capacity, not markedly good at any one subject, and yet not markedly feeble; and it is these who are the chief problem. The first class need careful special training; the third class are probably not adapted for an intellectual education at all. The second class are really the difficulty.

The new scheme of the Board of Education is probably the best attempt which has yet been made to deal with the situation. It amounts to this: that up to the age of sixteen or thereabouts boys should be taught the things which no one can well dispense with—English, a foreign language, elementary mathematics, elementary science, history, geography, scripture, and if possible a handicraft of some sort. By the age of sixteen it is generally possible to discern an aptitude of a definite kind. After that

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Price, Re. 1-2.

First Edition, July 1911.

Fifteenth Edition, April 1917.

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age, then, a boy should be enabled to give a little more time to his particular aptitude, not simply specialising, but providing a sensible balance. Then, it may be hoped, the Universities will be more elastic in giving to all boys, who are capable of profiting by higher courses of study at all, a chance of pursuing a special subject. Thus, it is suggested, we might turn out men who really had a subject, and moreover had the simple accomplishments necessary for efficient work in the world.

But now we come to a more difficult part of the subject. What on the whole should general education aim at? Education used to be divided into ancient and modern, the classics forming the bulk of the ancient, and modern languages with science being included in modern education. But it is clear now that this is a wholly false division. The true division is literary and scientific; and this must be considered more in detail.

The old theory of humanistic education, as it

is called, was simple enough. It was an attempt to train the mind in the best that had been thought and said in the world, instead of on a subtle but arid theology. It consisted of poetry, philosophy, and rhetoric, and was based on classical literature; but it must be remembered that there was then no science at all, very little history, no geography or ethnology to speak of, very little modern literature, and little mathematics. It was partly moral and partly intellectual, and it aimed at fortifying and refining the mind.

It was not really till the nineteenth century that the modern and scientific subjects began to claim attention, and it all came with a rush. Scientific discovery, exploration, pure and applied mathematics, modern literature, all began to accumulate results and conclusions of startling import. But the old order was so firmly rooted, that it was not until some fifty years ago that these later subjects began to creep into the curri-

ENGLISH CONVERSATION.

In the first instance, there must be something to talk about—some subject in common between the teacher and his pupils, for then and then only can the teacher hope to interest his pupils and encourage them to express themselves in simple English. "**Picture Composition**," by **J. Nelson Fraser** (Pupil's Book, **As. 8**. Teacher's Book, **As. 12**) furnishes materials of this type in abundance. Each set of pictures can be utilised as the basis of conversation lessons or as providing subject-matter for "free composition." Besides, the effort made by the pupils to interpret a "picture-story" will not only develop self-expression, but will also train their powers of observation and stimulate their imagination.

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culum of schools; ever since that date there has been a steady struggle. Subject after subject forced itself in, while the old guard, the classicists, disputed every inch of the ground. The result has been a hopeless congestion, and the elements of so many things have had to be taught that only the cleverest boys contrived to assimilate what may be described as an intellectual kedgerree. Now we have come to the point when it is obvious that everyone cannot learn everything, and what we have to do is to settle a very simple core of education, providing enough variety to detect aptitude, and, as soon as aptitude is pronounced, to enable it to be cultivated.

But the danger at the present moment is this, that the classical system, thrust into a corner by modern subjects, provided so desolate and tough an education, concerned as it was with such a mass of grammatical niceties, anomalies, syntactical peculiarities, that it had not a chance itself of enlightening or encouraging its victims, and

yet, by claiming so much time, kept the other subjects all in elementary stages too. The impatience and the rebellion produced by this reactionary and stagnant system have risen to such a pitch, that we are in danger of arguing that, because the classical system has failed, therefore literature has failed. I have been reading a vehement little pamphlet lately in which the author speaks of feeling "a grave concern as to the triviality of the literature to which the education of the present day leads; so much about the failings and foibles of human nature, so little about the majestic and inexorable laws of the physical side." Such reformers as these say, "For goodness' sake, let us have an end of all this nonsense: instead of feeding the minds of boys upon old human visions and fancies and imaginations, let us feed them with realities. Let us teach boys something about the world in which they have to live." With this attitude it is impossible not partly to sym-

STORY-REPRODUCTION.

The story must be such as will interest and appeal to the Class by reason of the familiarity of its atmosphere and sentiment.

It must have some sufficiently obvious point or simple moral.

The language of the story must be plain and simple.

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pathise. But the danger, as I say, is that we may simply substitute one tyranny for another. I was always very anxious for elasticity, and worked hard for many years to break down the rigours of the classical system; but it was all in the interest of elasticity and special aptitude. I do not want to turn out the old system neck and crop, simply to introduce another system just as tyrannous and just as neglectful of temperament and aptitude.

Human perception and intelligence is somewhat sharply divided. Some minds are abstract, others concrete. Some minds are interested in ideas, in beauty, in old traditions and memories, in human adventures and experiences, in religion, in political theories, in the slow organisation of communities, in problems of government, in schemes of social reform—in everything in fact which deals with human temperament and character. Other minds are interested in more concrete things, in the phenomena of nature,

properties of matter, substances, machines, contrivances, manufactures, applied science generally, by which the laws of nature are used to serve human welfare and convenience. Both these sides of life are entirely worthy of study and attention, neither is negligible, and it is worse than childish for either type of mind to allege that the preferences of the other type are unimportant.

A literary education, as it is called, is a study of all that deals with the emotions, hopes, fears, desires of mankind, and to some minds these are the transcendently important realities to life; a scientific education deals with man's material environment; and as man is a spiritual being living under material conditions, it is of the utmost importance that both should be studied and realised.

Such a statement as that which I read just now, about "a grave concern as to the triviality of the literature to which the education of the

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present day leads; so much about the failings and foibles of human nature, so little about the majestic and inexorable laws of the physical side," is palpably one-sided.

It appears to me, in the first place, a very unscientific position to take up; for surely "the failings and foibles of human nature" are just as much scientific facts as any other thing, just as much the outcome of the "majestic and inexorable laws" of nature as any physical fact. Considering how much of science has been constructed out of the patient study of innumerable details, apparently very trivial in themselves, it is clear that the failings and foibles of human nature are, at least, as worthy as all other details of scientific consideration.

And then, too, human nature as acted upon by the inexorable physical laws is the thing, after all, which concerns and interests us most. It is true that we have to live in a physical universe and we must recognise physical laws. But a

minute study of those physical laws must always be a matter for specialists. The ordinary human being has not time or intelligence to go far in the direction of scientific research, while the whole of his life is spent in contact with human nature, and its faults and foibles. It is far more important for the ordinary human being to know something about human nature than to know about ocean currents and tides, about light and heat, about stars and meteors. The only part of scientific knowledge which is of practical concern to most human beings is the elementary facts of physiology. And the practical effect of learning about the heroic possibilities of human nature, being moved by stories of courage and patience, of pity and affection, is far deeper and greater than the effect of learning about the motions of planets or the origin of storms, because none of us can escape from the problems of human nature, affecting our daily conduct and our relations with other men, learned and unlearned

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alike; while the properties of matter, the laws, let us say, of electricity or chemistry, are at best remote from daily life, and can only be apprehended and applied by experts. All of us, for instance, know what it is to be affected by the look of anger or affection in a fellow-creature's face; while the fact that we can only see it because a combination of carbon with oxygen produces an undulatory vibration in the ether which is luminous is not a consideration which can ever have very wide appeal. For even when we know *how* it happens, we are not much nearer to knowing *why* it happens.

And then, too, the greater part of civilisation and progress depends not upon the scientific discoveries which add to the comforts of life, but upon the cultivation of generous motives, of disinterested sympathies, of desire for justice and order and co-operation. Human happiness is far more knit up with the art of living peaceably and affectionately with other human

beings than with the inexorable laws of matter. Birds and bees live in the universe without any scientific knowledge of its laws, but with much instinctive and precautionary acquaintance with them. A bird knows what food it needs, and what is dangerous, without having an idea of why it needs food, or why a course of action is dangerous; and the importance of literature is that it develops the imagination and sympathy of man, while science may perhaps cultivate imagination, but can hardly be held to develop sympathy.

I am wholly in accord with the desire to teach human beings something about the wonders of the physical world in which they live; but to turn our back upon human nature, its hopes and fears, its visions and dreams, its sins and failures, seems to me to be the most short-sighted policy. We are not yet all abstract intelligences; we are imperfect beings living in communities. Character rather than intelligence is the real

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aim of education, and if that is so, then "the proper study of mankind is man."

The real difficulty of the whole position lies in our vagueness of aim: we do not really know, and we have never troubled to decide, what we desire the educational process to do for our children. My own belief is that it is a three-fold aim. In the first place, education should be elastic enough to enable us to discover aptitude and capacity, and therefore we want variety. The mistake of the classicist is that his ideal education is only a device for discovering literary ability, and the mistake of the modern reforming scientist is precisely the same; a scientific education is a device for discovering scientific capacity. What we need is a method of finding our future experts, for it is of the utmost importance to the race that we should discover, evoke, and use every sort of intellectual ability. What we need is an education both literary and scientific, dealing with ideas and emotions and imaginations

as well as with perception and observation and exactness of mind, so that at the time when vocation begins to declare itself we may skim the intellectual cream, so to speak, and set free the best abilities and capacities to pursue their own bent. That is the first aim of education, the discovery of aptitude.

The next aim of education is a wider and more general one: it is to reveal as far as possible to the growing mind a real idea of the conditions under which it lives and will have to live. Science is an integral part of such an education, and general knowledge of physical laws and processes is of primary importance. The stars we see above us, the physiography of the globe, the laws of electricity, of weather, of heat and cold, the distribution of plants and animals, the laws and processes of life, a knowledge of mechanics, of manufacture of commodities—about these things no one should be wholly ignorant, but for many a general conception must suffice.

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Then on the other side come the history of the human race, the rise of man, the growth of ideas, emotions, religious beliefs, the shaping of communities, the interplay of nations, the history, in fact, of civilisation—all this belongs to what may loosely be called the literary side. But to deal merely with scientific conceptions and laws, and not to teach how the spirit of man has developed, how he has organised human society, how he has slowly discovered and availed himself of scientific knowledge, is to leave out what is, perhaps, our main concern. What we have to do is not to leave our youthful citizens in a sort of bewildered solitude, just aware of the little circle in which they live, but to give them on one side a sense of what the natural world in which they live is like, as well as a notion of how humanity has developed its institutions and its principles.

The third aim of education is to train children in good moral and physical habits, to develop

wholesome mental interests and robust health of body—the training of character in fact. But here the problem is a complicated one. If we only nurture the young in strength and health, and encourage them to believe that the world is a place to get all they can, to fortify themselves in wealth and comfort, we have not developed good citizens at all. They must learn what duty and service and self-sacrifice mean, and that a man's concern is not only himself. This can only be done by the cultivation of an imaginative sympathy, which can put itself in the place of another, and desire to share rather than to amass happiness. This can only be communicated by a perception of the beauty, the generosity, the heroism of human nature, its hopes and aims; and this I believe frankly cannot be attained by the knowledge of scientific laws, but only by human records and the noble flights of human imagination. A literary education is a feeble enough thing if it only

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deals with grammar and syntax, artifices of style, the jingles of rhythms and prosodies, the devices of ornament and cadence—and this was the fault of the classical education, that it so seldom broke through the outworks into the citadel itself. But the truer and more scientific view of literature is that it is the evoking of a real love of spiritual beauty, and that the masterpieces of literature are great, not because they conform to the rules of critics, but because they answer most nearly to the best and loftiest visions of the human soul—that Homer and Shakespeare and Dante, let us say, are great because they best mirror man's greatness, and not because they afford most scope to the inquisitive pedantry of scholars. What, indeed, we have to fight against is pedantry, which is simply the fault of nature so one-sided in their preference that they lose the smallest details of their study with a significance and accuracy that violates all proportion. The literary pedant and the scientific pedant are alike unachievable, because they worship detail and disregard design.

The aims, then, of education are the fortification of health and character, the communication of a general conception of the world as it is, both socially and physically, and the discovery of aptitude and ability, so that the resources of the State may not be wasted or dissipated.

Our education, then, must be framed on these generous and elastic lines. What wasted time and energy, and dispelled all intellectual curiosity in the old classical curriculum was the futile insistence on petty detail. Few boys ever struggled through the mass of trivial elements with which they were confronted. Exactly the same will be the fate of the strictly scientific education if we exchange one tyranny for another. When I was an Eton boy, forty years ago, science was just beginning to be taught in the school. I remember well a course on hydrostatics, which will serve to illustrate my point.

There was no apparatus available. Our teacher gave us a general view of the subject in two or three preliminary lectures, with a few very ill-drawn diagrams on a blackboard. Still, I remember that this was not without some interest. But our teacher was really a mathematical master, and as soon as possible we began to calculate the weight of columns of water—and thus continued for the remainder of the term, so that it became a baser sort of mathematics, and induced in my mind the conviction that hydraulics was the dreariest of subjects. I remember a scene which took place at one of these lectures. Our teacher had drawn upon the board a hydrostatic press with an object in it of which he diffidently said, "It might be a cheese; it might be a hat-box." A lively youth, who has since won some distinction in literature, said in a cheerful tone: "But what is the use, sir, of all this?" To which the bewildered instructor, poised his chalk in his fingers, said: "Use? Use? What's the use of you?"

On the other hand, when I was a boy of nine, my father, who was then headmaster of Wellington College, and had a great belief in the admixture of science with literature, arranged for some popular scientific lectures for the school, and took me in to one on elementary physiology, dealing with the digestive apparatus and the blood. It was illustrated with simple apparatus and lantern slides. I can only say that it awakened my curiosity to an extraordinary degree, and I have never forgotten what I then learned.

What I would deduce from these personal adventures is this—that to most boys, even a boy like myself, whose tastes even then were mainly literary, the general notions of science are extremely attractive and interesting, but that when they come to be exactly applied they suffer the same eclipse that the classics suffer by over-emphasis on grammar.

Now I am not to be supposed to be recom-

mending that education should be a loose, vague stimulating process. I believe that toughness and exactness of mind must be relentlessly pursued. But the question is how and when. If it is the only thing aimed at from the beginning, the effect upon immature minds is simply to obliterate interest by means of drudgery. The poisonous part of the classics, taught as if everyone was to be a classical specialist, was to hang the veil of grammar and syntax between us and literature. The mind of boyhood must be for ever wooed to learning. The boy is capable of taking an immense amount of trouble if only he can be persuaded that he is not doing work; but to extinguish his fancy, his imagination and his curiosity is a fatal mistake. What I therefore plead for is that up to the age of fifteen, or thereabouts, the boy's interest, curiosity, liveliness, emotion, sense of beauty, sense of amusement, should be firmly kept in view. It must not be all discipline. The use of mathematics, the training in a modern language, the writing of clear and correct English, the orderly arrangement of thought, are all disciplinary; but unless there is interest and animation, all this is purely mechanical. Many a boy has a pride in authorship; the difficulty is that he has no stores to draw upon. Here science and literature can be easily intermingled, if boys can be taught to write clear accounts of experiments which they have seen. The old literary exercises were dreary because they had nothing to do with the boy's own experience. The same must be done with literature. A part of English teaching ought to be simply to show the boys how to read the great books. We used, in my Eton days, to be set a play of Shakespeare for a holiday task. What did we do? We read the historical introduction, and we got up the notes—about such things as "kerns and gallowglasses"—we did not read the play at all, except that we learned some twenty lines by heart because we were generally asked to quote any passage we had admired. In dealing with older literature there

are three sides to consider—imagination, expression, erudition. The result of our teaching was to neglect the first, to dally with the second, and to converge upon the third.

If by the age of about fifteen or sixteen you have assured a boy's interest in general ideas or science and literature, given him some sense of history, by which I mean European history of a biographical and social rather than of a diplomatic or military kind, taught him to read and write simple French, to read and write English, to calculate quickly and correctly, you have done a great deal. It is very difficult to say exactly what we mean by a well educated boy of eighteen; but if a boy of that age can read an interesting book on some subject of general current interest with something of a critical spirit, and is not wholly at the mercy of a specious and attractive presentment; and if, moreover, in reading a newspaper he does not confine himself wholly to the athletic column, but wishes to know more or less what is going on in the world—well, I for one should be ready to admit that he was a well-educated boy.

There is a delightful story told of Hookham Frere, who was the lifelong friend of the great Canning. "I was walking with Canning," Frere said, "over Wimbledon Common, and we came to a little pool into which Canning gazed with a lively curiosity. 'Frere,' said he, 'what are all those funny little black creatures crowded together and swimming about so busily?' 'Tadpoles, of course,' said I. 'These are tadpoles, are they?' said Canning. 'I have heard the name, but never saw them before. And, pray, what are tadpoles?' 'Well,' said I, 'they are tadpoles, but they will soon be frogs.' 'But these are not frogs,' said Canning, 'nor in the least like them; they are a sort of little fishes.' 'Don't you really know,' I said, 'that tadpoles are the young of frogs?' 'No,' said Canning, 'I never heard of such a thing; are you sure? They are the oddest little things I ever saw.'"

"Now," said Hookham Frere to his auditor, "don't you go and tell that story to the first fool you meet: Canning did not know that tadpoles turned into frogs, but he could rule a great nation, and he would not have ruled it any better or any worse if he had known. There are hundreds of things just as true and real which none of us know. It wasn't his business to know about tadpoles; it was his business to know about politics and foreign affairs, and to be a good judge of men."

This story goes side by side in my mind with a story of the poet Clough. A sort of consternation had been caused among a party of Dons by a very active politician who had admitted that he had never heard, so far as he knew, of the battle of Marathon. Someone said to Clough afterwards, "Is not that simply incredible?" "I don't know," said Clough. "I don't see what difference it made to him not knowing about it. Of course, it has made a great difference to us all that the battle of Marathon happened, and that the West held back the East. But no doubt many more important things happened in pre-historic times about which we do not know. I don't see what difference the mere knowledge makes."

There is much truth in that. We are much too disposed to think that knowledge in itself is valuable. It is valuable precisely in so far as it inspires and animates and trains the mind. The mere knowledge of facts is very unimportant. The expert must know the facts and processes of his subject, of course; but apart from expert knowledge, no knowledge is valuable which does not mean the kindling of interest and faculty. The fact which one cannot forget is the significant fact, not the fact which it seems easy to confuse or impossible to remember. In my own mind, certain facts are self-evident almost, while others melt like snow in a thaw; but I do not, therefore, hold that the facts which I remember are important, and that the

facts which I forget are unimportant—it is all a question of the range and quality of minds, and the extent to which facts modify the work they are doing. I cannot help feeling that in the present push for science as an educational subject a certain confusion exists between the practical utility of science and its value as an educational subject. Elementary and general acquaintance with concrete phenomena and technical processes has no practical utility at all; it is the expert who is useful, the highly-trained specialist. A thing which is practically useful has not necessarily any educational value. What we want to discover is a subject or a set of subjects which quicken intelligence and observation and sympathy and accuracy, which extend the imaginative horizon, which make a man accept his duty and his place in the State, not as a matter of unpleasant necessity, but as a matter of active and eager concern. I do not believe myself that any one subject can do this. If literature, as it has been taught, has failed to exert this influence, I see no reason to believe that science *per se* will do it either. While we abominate the aggressive and mediæval theories of domination which have plunged Europe into strife, it is the tendency of, at all events, a section of our community to point to Germany as a country which has contrived to produce an extraordinary average of efficiency, a formidable unanimity of aim. Yet, if we look at German secondary education, we find that science is actually taught for fewer hours in their schools than in our own. That has been established by the new Committee which is examining the question of scientific education. It is certain, I believe, that if scientific education has not had a fair chance, it is not for want of time or of apparatus—it is much more a question of method, and still more of teachers. This is really where our difficulty lies. We do not believe sufficiently in education to pay our teachers properly or to make it a career for the

best men. The personality of the teacher is the root of the whole matter. What we want is men not only of clear intellect, but men with a touch of inspiration, with a living interest in the beauty and nobility of the subjects they teach. There are many dormant seeds of interest and faculty in boys' minds which can only be quickened to life by something ardent and fructifying in the mind of the teacher. A good teacher is hardly hampered by a bad curriculum, a bad teacher is hardly assisted by the best curriculum. It may be said that it ought not to be a question of money, but you cannot expect any but the real enthusiasts to embrace a profession which hampers them at every turn with straitened resources and pecuniary anxieties. A man who wishes to marry and bring up his children liberally and intelligently will go where he can find the means of doing this. You may depend upon it that we shall do nothing in education by a mere juggling with curricula; we shall only do it by securing good and enthusiastic teachers. The imitative faculty of boys is great; and if they see a teacher who really derives animation and joy from his subject, they will wish to acquire the same happiness. Education is not a scientific process; it is a contact of living minds. I remember once examining a number of educational experts on the question of the curriculum. Each of them had some one subject which he declared had solved the question of discipline and drudgery by evoking a natural interest in the pupils. It gradually dawned upon me that each was selecting the particular subject in which he was personally interested; and I perceived that what had carried the day in each case was not educational technique but personal enthusiasm.

Let me, then, very briefly summarise my conclusions. What we want is a simple and elastic curriculum which shall cater for individual taste and aptitude, and correspond in a general way with human faculties and interests.

Intellectual discipline—by which I mean that most valuable power of mastering a subject whether you are interested in it or not—can be attained to a certain extent by the uncongenial subjects whatever they may be. But I do not believe in intellectual progress being possible without intellectual interest. The general aim of this curriculum should be to give the pupils some conception of the world as it is; and in this science, literature, art, music, history, geography, mathematics, handicraft, language and religion must each have a part. Imagination, logic, clearness, observation, interest—these are qualities at which we should aim. Then, when special aptitude is discerned, in the later stages, a certain specialisation may begin. What really happened in classical education was that, under the guise of a pretended width of culture, all minds alike were forced into a premature classical specialisation, and this mistake we must not repeat. And, lastly, we must make the profession of teaching remunerative and dignified—that is the most important point of all; and unless we can do this we may shift our curriculum for all eternity without ever emerging out of a rambackle sort of drudgery which will continue to hang like a dreary veil between the ingenuous child and the glowing interests of the great world in which he has to live and play his part.

DISCUSSION.

THE CHAIRMAN (the Right Hon. Viscount Bryce, O.M., D.C.L., LL.D., F.R.S.), in opening the discussion, said he had seldom listened to a discourse of forty minutes which contained more truth put more brightly and agreeably, and the only difficulty he had in commenting upon it was that it raised so many interesting lines of thought. He would, therefore, confine his attention to some of the most important propositions that had been laid down, and the conclusions most suitable to the present time. In the first place, the author had said with perfect truth, although the obvious fact was often forgotten, that there was in most minds a hopeless confusion between the practical utility of a subject and its educational knowledge. The two had literally nothing to do with each other. The things which were of most use might be the

things which an individual could not learn or understand. For instance, nothing touched an individual, next to his conscience, more than his health; but if he undertook studies in physiology and pathology, with a view to making himself capable of dealing with his own health, he did the very worst possible thing for it—he would always be in the doctor's hands. In the second place, the author had stated that literary subjects, and, above all, studies of the ancient classics, had been ruined in the minds of most boys by the undue insistence upon those grammatical minutiae which might be interesting to the teacher, and which were, in a certain sense, the foundation of a thorough knowledge of the languages, but many of which were beyond the intelligence of the ordinary boy, and of little or no value for the appreciation of good literature. Long treatises had been written upon the particular use of *mō ou* and *ou mō*, but it was perfectly possible to appreciate Greek literature with the scantiest knowledge of both of them. That was a thing which it was earnestly to be hoped might be reformed, and it would be reformed if the new race of teachers existed for whom the author sighed. In the third place, the author said with great truth that it was necessary to pay the teachers better. The teacher was the school; the curriculum was the teacher. The good teacher made every curriculum interesting, and it was impossible to expect to have the choice intellects required for the work of teaching—especially the higher kind of teaching—without paying them better, particularly in view of the manner in which all prices had risen during the last twenty years. The country ought to be prepared to go further in that respect, feeling sure that in no direction could it make an expenditure that would be more truly remunerative. In the fourth place, the key to the question in regard to classics was that classics were an instrument for the training and developing of the mind and thought of the best pupils. Classics would be thrown away in their highest literary quality upon the majority of pupils. The problem was how so to order the arrangements of the schools and Universities that it would be made certain that the classics would continue to be taught to, and studied by, the best students—whether that percentage be 20, 30 or more—who were fitted to appreciate the true value of classical literature, to make it a part of their minds, and to make it interpretative to them of human nature and of history. That was the real object of classics—to appreciate

the ancient world, to get a grasp of the worth which was in those ancient races, and which was precious because of that, and without which no history could be comprehended. But how was that to be done, and how were the classics to be kept in the Universities and in the higher branches of schools, with due regard to those who would not reach that point in classical study? That was the kernel of the present difficulty. They did not want to impose classical study on everyone, and yet they wanted to have the opportunity of discovering who it was that possessed the qualities which would enable him to prosecute it with real advantage to himself and real benefit to the whole community. One of the greatest difficulties which the teacher experienced at present was the passion of boys for the athletic column, to which the author had referred. He believed that no small proportion of the difficulties which teachers felt was owing to the extravagant fashion which boys had contracted, not for athletic sports—the sports themselves were admirable, and it was impossible to have too much sport and physical training for the boys—but the passion for reading and thinking about them. That was a feature which was comparatively new. When he was a boy at school there were no athletics—he wished there had been—but he was almost glad that there were none, because there was then no athletic column and no such thing as a sporting journal. There was no boy in his school of 700 boys that ever read anything about any athletic sport whatever. That was a state of things which it would be impossible to regain; i.e., he did not believe it would be possible to have athletic sports in a school, which were eminently desirable, without having that passion, but he thought the passion for reading about them had reached extravagant proportions. The great aim of education was to create the habit of observation, of intellectual curiosity, of thinking, and of reflecting upon what one saw. That was the real end of education in all its branches, whether it be science, literature or history. What teachers wanted to do was to make knowledge delightful to the mind. It was not knowledge that was important, but the love of knowledge. An education which instilled a real love of knowledge and the desire to make every step in knowledge a step to something else, and the basis for thought and reflection in the

mind of the pupil, had attained its object. And the best education was that which did it best.

Dr. G. Armitage Smith (Principal of Birkbeck College, London) said he fully endorsed all the opinions that had been expressed upon the general problem of education. There were two sides of education—arts and science—and he had often thought that those who specialised more particularly on one of them were not as much in real contact with the subject as was desirable. The crux of the whole matter, as the author had clearly pointed out, was that training either in science or in arts up to some point was necessary to get an educated man, a man who had learned to think. If the paper were widely circulated he thought it would solve a great many difficulties that were in men's minds. During the last year or two he had read many educational papers with the object of endeavouring to ascertain what were the correct views upon education, and he was completely perplexed; some said that science was the only thing, while others said it was arts. The author had shown that it was neither science nor arts alone, but the theory which was involved in both that was necessary—the training of the mind, the love for knowledge, and the power of expressing it.

Sir William A. Tilden, D.Sc., F.R.S., said that as a teacher of science for fifty years he had always held in due respect the subjects which were claimed to possess such magical powers by the representatives of literature, and he therefore felt much gratified to find that the author had shown a kind of liberality of view without which it would be impossible to get to the end of the dreadful controversy which existed. The conflict between literature and science had been going on from as far back as he could remember, and he had always thought that it was a most deplorable state of affairs. He thought it would be found, however, that it was only the extreme partisans on either side who held the extreme views. Unfortunately, some literary people, especially those who pursued the study of the classical languages, were particularly obdurate in their attitude; on the other hand, it must be admitted that some of his scientific friends went further than he personally would like to do in pressing the claims of science as a department of learning or as an educational subject on the teaching

community. He thought the paper would have a very valuable effect in helping to modify the extreme views which were held by the partisans on both sides. He had felt for many years past that the statement made by the Chairman was perfectly true, that the study of the classical languages with a view to claiming an acquaintance with classical literature applied only to the best of the boys. Personally, he would like to go a step further and divide the boys into four classes. In the first place, there were the superior, intelligent boys, who were drawn on the one side to literary subjects; in the second place, highly intelligent boys who were drawn to the other side, the observation of nature and the study of experimental science; in the third place, there was the mass of good boys, generally speaking, who received good reports from the schoolmaster and who made excellent citizens, but who were not brilliant: they would go whichever way their parents or their schoolmaster invited them to go. But there was a fourth class which had never been properly provided for, and he could not help thinking that much educational energy had been wasted in the past in endeavouring to make the lame ducks run. There was a certain class of boys and girls in whose minds it was impossible to arouse any particular kind of interest, no matter what subject was presented to them. Those students, in his view, should not be allowed to cumber the classes of the schools; they should be promptly turned out at a certain age, say, sixteen or some thing of that kind, and made to pursue some other useful employment, which would be much more satisfactory to themselves and more valuable to the community. That question ought to be faced at the present time, when things in general were being treated in a serious spirit, and he hoped it would receive more serious consideration than had been the case in the past. He noticed with much interest, a few months ago, the scheme put forward by Dr. Lyttelton, who had just left Eton, in which he provided a class for boys in which neither Latin nor Greek was taught; everything was to be English, with a little mathematics. That was the first attempt that had been made to deal, by a definite system, with the class of what it was impossible to avoid calling stupid boys. He congratulated the author on having made a move which from the authoritative position he held, would

a good effect in modifying the extreme views of people on both sides.

Dr. R. Mullineux Walmsley (Principal of Northampton Institute, London) thought the present crisis in the educational world was of no less importance than the crisis in the political world, and that the views enunciated in the paper would lead along the right path to a solution. He did not propose to speak from the scientific side, because, like the author, he thought there should be no antagonism between literature and science when the subject of education was being discussed. It was not what an individual learned that was the important thing, but how it was taught, how knowledge was acquired, and the influence of the teacher. One of the statements in the paper which appealed to him most deeply was the remark that, in order that our educational system might enter upon a new phase, it was necessary to attract into it the best intellects of the country, and that to do that the prizes in the educational world must bear some relation to the prizes in other walks of life. In that way the ideal teacher that the author indicated would be obtained, namely, *the man*. It was the man in the highest sense of the word that was required for educational work. Nothing would so influence the coming generation as the personality of the teachers in the schools, and unless that personality was obtained curricula, whether scientific or classical, were of no consequence whatever. He differed from Sir William Tilden's interpretation of the Chairman's remark, that only the best boys in the school would arrive at the highest literary attainments taught in the school. Personally, he interpreted the Chairman to mean that only the best boys with the literary instinct would get that far, and that there were best boys in other directions. The best boys were not to be picked out because of their interest and their acquirements in a single side; it was necessary to have the others as well. He had very much sympathy with the "submerged tenth"—he was afraid it was more than a tenth—to which Sir William Tilden had referred; and he had publicly stated on a previous occasion that there were certain boys and girls upon whom the money of their parents, the time of their teachers, and the accommodation of the class-rooms should not be wasted after they had acquired the three R's. They should be put to something else. It was perhaps rather hard on the boys, but those who came in contact with large numbers of them knew that there were in the schools boys who not only wasted the time of

their teachers, but also kept back the classes. He was afraid that the paper had not given a solution to that problem, which he commended to the attention of all educationalists, because if that part of the problem was neglected the highest education in the schools would be impeded by the residuum.

Professor A. C. Seward, F.R.S. (Master of Downing College, Cambridge), thought, as the author truly said, that one of the first aims in education was to discover the aptitude of the student, and that often seemed to him one of the strongest arguments in favour of the suggestion that science should be taught to every boy in a school. Many boys who had not had the opportunity at school of learning any of the natural sciences had, on that account, largely wasted their time, and they had perhaps been classed as the "submerged tenth." There were a good many boys who for years during their school life appeared to have no particular aptitude for the ordinary school work, and yet in later life, after they had gone to the University perhaps, they suddenly discovered something in which they were really interested, and that was not infrequently some science subject. It was not because he desired everyone to be a scientific person that he advocated the teaching of science to all the boys in the school, but largely because by doing so there was more chance of discovering boys who had an aptitude for that particular branch of learning. It was often overlooked that success depended very largely indeed upon the personality of the teacher. He had often felt that the great aim of a teacher should be to make his pupils interested, a point that was frequently overlooked. A lecturer often worried as to whether he had sufficient facts for a lecture, but he frequently did not pay enough attention to the question of whether he was going to place the subject before the students in such a way that it would be interesting and real to them. If boys could be made interested in a subject they would do almost anything. The author had touched upon the question of science, as contrasted with literature or classical education, from the point of view of the effect upon the training of the imagination. In one or two of the statements the author had made he did not think sufficient credit had been given to science, more especially biological science, for the influence it had, if properly taught, on the spiritual side of a boy's life. The author spoke of science as being the study of material environment and as being to a certain extent rather materialistic, whereas other

subjects tended to develop the other side of a boy's character. He felt a great deal of sympathy with the remark of a character in one of Meredith's books who said, "Men of science, my Cassandra, are always the humanest." Some of the most human people he had known were people who had been naturalists—not necessarily people who had the most minute or intimate acquaintance with any particular science, but people who had been brought up from their youth to love nature, who had been taught science at school, and who had gone on in after-life teaching themselves. He did not know any subject which, if properly handled and placed before students in the right light, was more likely to develop the good side of their nature. Some people held the idea that if a person knew anything about the structure of organisms, of a flower or an animal, they lost their æsthetic pleasure in it, but he was absolutely certain that was not the case. He did not mean for a moment to suggest that science could in any sense replace what a literary education could give, because he felt that anyone who was brought up on a scientific education, without due attention having been paid to a love of good literature, was only half developed. He thought the tendency was more and more noticeable at the present time not to push one subject, science or classics, as they were generally called, at the expense of the other, but that, as the author said, due attention should be given to both. He was very pleased the author had quoted the story about Canning, because it expressed the opinion he had often held himself, namely, that one came across so many people who professed to be ashamed of not knowing certain things. The late Bishop of London made a remark which it seemed to him was exceedingly true in that connection, namely, "Never be ashamed of not knowing, but be dreadfully ashamed of not wanting to know."

On the motion of the Chairman, a hearty vote of thanks was accorded to Mr. Benson for his interesting paper.

Mr. A. C. Benson, in reply, after thanking the Chairman and the other speakers for the very kind way in which they had received the paper, said he desired to emphasise, in order that there should be no misunderstanding, the point which one speaker had brought out very clearly, that the whole object of the paper was that there should be no antagonism between the two sides. He agreed with Dr. Seward that science should be taught to all, because he thought there was a certain stage in the develop-

ment of the human mind when concrete observation was alive, before the reflective powers came into full swing, when a child was inclined to pull everything to pieces and ask questions, which parents found it so impossible to answer, partly because they did not know and partly because the questions themselves were unanswerable. Quite in the early stages, and up to the time when the roots divided, science should be taught to everybody, and an attempt should be made to make the mind more or less familiar with the whole range. When he was a schoolmaster at Eton he tried an experiment which seemed to him to be fruitful of great possibilities if it could have been further developed. He bought one day the entire stock of a news-vendor of a morning paper, gave a copy of the paper to each boy, and lectured on the paper as a whole—the weather reports, markets, and everything else. He knew enough of the subjects to teach the boys that the views of the world were making themselves heard through the paper, and showed them that, although it might be difficult to believe it, there were distinguished and intelligent people who, immediately they received the paper, hurriedly tore it open and looked first at the item that interested them, however dull and unintelligible it might appear to the boys. He wanted them to appreciate that the paper represented the life of the world; he wanted the growing boy to get some conception of the world, not only as it was seen and viewed, but as it was heard of in books. Dr. Seward had alluded to the imaginative value of science. Tennyson, as a boy, was very much devoted to astronomy, and when one of his brothers complained that he had been invited to tea at the neighbouring vicarage and that he felt shy, Tennyson said: "Why not try and think of the star clusters?" The brother tried to do so, but pronounced it a most colossal failure. When he was confronted with the circle of faces round the tea-table at the vicarage, no amount of turning the mind on to star clusters and constellations was of the slightest help; it only made him feel more shy than before. Lord Bryce had inquired whether classics were to disappear in the scheme that had been suggested. They would not, according to his theory. As a matter of fact, Latin was probably certain to hold its own for the present, although personally he did not think it was a very good subject to keep. It was supposed to be a good mental training, and to be the basis of many other tongues; but if the object of education was to teach the other tongues, why not teach them instead of

the basis? The real difficulty about Latin was that Latin prose which was suitable for amateur minds was practically non-existent, whereas, so far as Greek was concerned, the "Odyssey" had been taught to many generations of boys, and he had seldom known any who had not been touched to a certain extent by the finest and greatest story in the world. The "Cyropaideia" was also an excellent book from which to teach Greek to boys. There was nothing like that in Latin at all. Cicero and Caesar were the media generally employed, and he personally felt that Cicero was singularly calculated to disgust the intellectual processes of the youthful mind. Caesar was a hard, compressed, rather rhetorical commentary on the most minute military operations; one moved slowly through a kind of dim light without any idea of what it was all about, reminding one of the hymn—

"... I do not ask to see

The distant scene; one step enough for me."

Lord Bryce suggested to him that Cornelius Nepos might be taught, and that was a possibility, but he thought there was a singular tenuity in the lives of Nepos. He was very grateful to his lodship for emphasising so strongly the object of education—the habit of observation, intellectual curiosity, reflecting upon what one saw, and making knowledge delightful to the mind. That was what they were aiming at, and that was what he believed an education based, to a certain extent, on the principles he had attempted to enunciate might do—i.e., an education with a broad sweep, not neglecting anything, with no antagonism, but merely attempting to acquaint the minds of the boys whom they wished to educate with the world as it lay about them, the history of the human spirit, and some outlook upon the future which would make the human race brighter and better instead of more complicated and dim.—*Journal of the Royal Society of Arts.*

CALCUTTA UNIVERSITY: POST-GRADUATE TEACHING.

DISCUSSION IN SENATE.

The adjourned meeting of the Senate was held at the Senate House, College Square, on the 14th inst., when the consideration of the report of the Post-Graduate Committee appointed by the Government of India, and the report of the Committee appointed by the Senate on that subject, was continued, the meeting lasting till nearly 7 p.m.

The Hon. Dr. Debá Prasad Sarbadhikari, Vice-Chancellor, presided and there was a fair attendance of Fellows, besides a large number of visitors.

The Hon. Mr. W. W. Hornell moved that the time limits be reduced as follows: Mover of an amendment, 10 minutes; and any person who seconds or speaks to an amendment, 5 minutes.

Rai Bahadur Dr. Chuni Lal Bose moved an amendment to the effect that the mover of an amendment should be given 5 minutes and any person who seconds or speaks to an amendment 3 minutes.

Sir Gooroodas Banerjee opposed the motion on principle. He said that the question before them was an important one, and the issues were momentous, and consequently it should be discussed freely and thoroughly.

A short discussion followed after which the amendment was put to the vote and declared lost. The Hon. Mr. Hornell's motion was carried.

The Senate then continued the discussion on the motion of Sir Asutosh Mookerjee, namely that the report be adopted.

Rai Kumudini Kanto Banerjee Bahadur: If the recommendations of the University's Committee be accepted, then we will be acting against the Act.

The Hon. Mr. Bhupendra Nath Basu: I move that this meeting be now dissolved.

The Hon. the Vice-Chancellor: Do you really and seriously move that or are you only asking a question like the Rai Bahadur?

CIRCULATION OF REPORT.

Sir Gooroodas Banerjee gave notice of the following amendment: "That from the motion the word 'adopted' be left out, and there be added the words 'circulated to the heads of all affiliated colleges,

with a request to submit their views on the report within ten days from this day, that a summary of those views be printed and circulated to members of the Senate without delay, and that the consideration of the report be resumed on Saturday, 21st April 1917."

Sir Gooroodas Banerjee wanted to alter his amendment by omitting the words "within ten days from this day," and by substituting the words "5th May" in place of "21st April."

The leave was not granted.

Sir Gooroodas Banerjee: I do not wish to be obstructive. If there is obstructiveness anywhere let the world see it.

Sir Asutosh Mookerjee: What is the imputation in the last sentence, Sir,—that the people who are not for granting the leave are obstructionists?

Sir Gooroodas Banerjee then withdrew his amendment.

The Hon. Mr. Bhupendra Nath Basu moved the following amendment, which stood against the name of Dr. Kedarnath Dass, who was not present: "That the Senate do resolve itself into a Committee for the consideration severally of each of the items of the report and of the recommendations of the Committee."

He said that the course proposed by the Committee appointed by the Senate was a matter which required very serious consideration and he thought that it had not had that consideration. The most reasoned report of a Commission composed of the best available minds of London was not in agreement with the report that had been submitted to them.

Dr. Suresh Prasad Sarbadhikari seconded the amendment. The Hon. Mr. Hornell and Mr. Biss opposed it.

Sir Asutosh Mookerjee said that they had very illuminating extracts from the London University Commission's report, on the assumption that the members of the Calcutta University Committee were not aware of the existence of that valuable document. That assumption was wholly unauthorised.

The Hon. Mr. Bhupendra Nath Basu, in reply, said: Are you learned members of the Senate going to pass this at once without further consideration in face of the fact that a Commission is shortly coming out? I should ask you to carefully consider every detail and not to expose yourself—I will not say to ridicule, but to adverse criticism.

The amendment was then put to the vote and declared lost.

CONDUCT OF TEACHING.

The following motion stood against the name of Sir Gooroodas Banerjee: "That in the motion after the word 'adopted' there be added the words 'with the following alteration in the draft regulations, namely, that the word 'mainly' be substituted for word 'only' in Section 2.'"

Dr. Urquhart also gave notice of the following amendment: "That in the motion, after the word 'adopted,' there be added the words 'with the following alteration in the draft regulations, namely, that the words in Section 2—'Post-graduate teaching in Calcutta shall be conducted only in the name and under the control of the University for this purpose'—be left out of the question in order to insert the words (before the two Councils, etc.)" "For the purpose of Post-graduate teaching conducted under the control of the University."

Section 2 runs thus: "Post-graduate teaching in Calcutta shall be conducted only in the name and under the control of the University. For this purpose two Councils shall be constituted, namely, the Council of Post-graduate teaching in Arts and the Council of Post-graduate teaching in Science."

The Hon. Mr. Hornell moved that Sir Gooroodas and the Rev. Dr. Urquhart's amendments be not put before the Senate, on the ground that they substantially raised a question already disposed of by the Senate by its discussion on Mr. Peake's amendment on Saturday, March 31. In his opinion, the putting of those amendments and consequential amendments to the Senate would be in contravention of the provisions of Section 22 of Chapter I of the Regulations.

Mr. Khodabuksh seconded the motion.

Mr. Archbold: Is it a motion or an amendment?

The Hon. the Vice-Chancellor: It is a motion.

Mr. Archbold: Therefore it cannot be put.

A lengthy discussion followed, after which the Hon. Mr. Hornell withdrew his motion.

Sir Gooroodas Banerjee then moved the amendment which stood against his name. He said that to take charge of the entire post-graduate teaching by the University would not be desirable in the interests of the University and of education. Why should they take away the privilege which the colleges had so long enjoyed? Once gone, those privileges would never come back. No case had been made out for the drastic change proposed. In conclusion, he referred to a speech delivered by Sir

Asutosh as Vice-Chancellor in 1914, in which he stated that the University would welcome all sound competition.

Mr. Archbold seconded the amendment. He said that this was machinery not only for degrading the finest colleges, such as the Presidency College and the Scottish Churches College, but also dangerous to the colleges in the mofussil.

Mr. Peake, in supporting the amendment, referred to a letter issued by the Syndicate to the Government of India in 1914, and pointed out that in that letter it was stated that there was no ground for apprehending unhappy competition and that the University would welcome all sound competition.

Rai Bahadur Kumudini Kanto Banerjee said that under the regulations, the report in question should have been first considered by the Syndicate.

Mr. J. R. Banerjee supported Sir Gooroodas Banerjee's amendment. In his opinion no case had been made out at all for withdrawing the affiliation of the private colleges in regard to the M. A. and M. Sc. classes.

Mr. G. C. Bose said that, according to the report of the Committee, there would be two Senates and two Syndicates, namely, the old Senate and the old Syndicate and the new Senate and the new Syndicate. The latter, with their fresh blood and new spirit, would be in charge of the post-graduate studies, and they with higher powers would dominate over the old Senate and old Syndicate. The result would be disastrous.

Dr. Dwarkanath Mitter found himself unable to support the amendment. Referring to the quotation made by Sir Gooroodas from Sir Asutosh Mookerjee's speech, Dr. Mitter said that what was true in 1914 might not be true in 1917. The condition of things might have changed.

Dr. Howells said that it seemed to him that the changes proposed promised to give new and fresh life to the colleges, which, under the present circumstances, could not be hoped for.

Dr. S. P. Sarbadhikari supported the amendment.

Sir Asutosh Mookerjee said he spoke with all sincerity when he told the Senate that he found himself in a most unenviable position. Speaker after speaker had addressed the Senate, had supported the amendment and had condemned the scheme proposed. Many of the speakers had passed their arguments on statements which

had no foundation in fact. Consequently it was impossible for him to try to persuade them that they were in error within the statutory time-limit. He then referred to the quotations made by Sir Gooroodas Banerjee and Mr. Peake, and asked why they were assuming that he could never grow wiser. Why had they quoted what he had said in 1914. They should have quite a different matter. What he wanted to point out was that the system should continue, or whether there should be an amalgamated system. Under the present circumstances, in the interest of the students, the proposed system was an ideal one. As regards Mr. G. C. Bose's remarks regarding the creation of two Senates, the speaker said that all he could say was that the talking Senate would have to give way to the working Senate. In conclusion, he said that in the best interests of the University the system which he was advocating would undoubtedly be a great improvement. Referring to the charge of hurrying through the matter, he said that this was a matter which had received their most anxious consideration. It had been very carefully debated upon and they could not be charged with hurrying through the matter. With reference to the amendment of Sir Gooroodas Banerjee, he said that that innocent looking amendment went to the very root of the matter. They were now called upon to decide whether they would adhere to the present system or to the proposed dual system which had been advocated by the Government Committee.

The amendment was put to the vote and declared lost, 16 voting for and 33 against it.

Dr. Urquhart next moved the amendment which stood against his name.

Sir Asutosh Mookerjee: Under Rule 22, Chapter I, no amendment shall be proposed which substantially raises a question already disposed of by the meeting. Does not this amendment raise the question which was already been disposed of by the amendment of Sir Gooroodas Banerjee? This amendment substantially raises that question in different phraseology.

The Hon. the Vice-Chancellor: I think it is covered by Section 22.

Dr. Urquhart: I refrained from speaking on the previous occasion on the understanding that my

amendment would not be affected by the rejection of Sir Gooroodas' amendment.

The Hon. the Vice-Chancellor: I said that you were at liberty to refer to the motion and speak on it.

Dr. Urquhart: I am sorry that I misinterpreted what you told me.

Three other amendments then fell through.

THE STAFF.

Mr. Biss moved: "That in the motion after the word 'adopted' there be added the words 'with the following alteration in the draft regulations, namely, that in Section 3 the words 'Every member of the staff for Post-graduate teaching under (a), (b) and (c) of this regulation shall be attached to one college or another in Calcutta' be added at the end.'"

Section 3 says: The staff of Post-graduate teaching in Calcutta will consist of (a) teachers appointed and paid by the University; (b) teachers whose services are, on the application of the University, lent from time to time by the local or Imperial Government or by a private institution, and who during the time they work under the University, are University officers; (c) teachers in colleges, whose attainments specially qualify them for post-graduate instruction and who undertake, at the request of the University and for a remuneration decided on by it, to deliver a course of lectures on selected topics, etc.

Mr. Archbold seconded the motion.

Sir Asutosh Mookerjee: So far as the principle is concerned I am absolutely in agreement with Mr. Biss and Mr. Archbold. If Mr. Biss is good enough to withdraw his amendment I will give an undertaking to put in a clause authorising us to frame rules.

Mr. Biss withdrew his amendment.

COMPOSITION OF COUNCIL.

In connection with the Post-graduate teaching in Arts where the clause deals with the composition of the Council, Mr. Biss moved that "all principals of Colleges in Calcutta which are affiliated to the University of Calcutta, shall be members *ex officio*" be added to it.

Sir Asutosh Mookerjee opposed the amendment, which was lost.

In connection with the same section, Mr. G. C. Bose moved that heads of all colleges in Calcutta affiliated to the B. A. (or B.Sc.) standard shall be members *ex-officio* of the Council.

Sir Asutosh Mookerjee accepted the amendment, which was carried.

The Hon. Dr. Nilratan Sircar moved that in the Council "four members, who are not engaged in Post-graduate teaching, should be annually nominated by the Faculty of Arts."

Rai Bahadur Dr. Chuni Lal Bose seconded the amendment.

Sir Asutosh Mookerjee could not accept the amendment, which was lost.

The Hon. Dr. Nilratan Sircar gave notice of an amendment to the effect that in the constitution of the Council, where it stated that "six members should be annually appointed by the Senate to the Council," the word "four" be inserted for "six" and the following be added: "Two members should be annually appointed by the Faculty of Arts." He wished to withdraw the amendment.

Sir Asutosh Mookerjee insisted on the amendment which was ultimately carried.

Dr. Urquhart moved that all persons engaged in Post-graduate teaching in colleges affiliated to Calcutta University should remain in the Council.

The Hon. Mr. Bhupendra Nath Basu seconded the amendment.

Sir Asutosh Mookerjee was not prepared to accept the amendment, which was lost.

In all 38 amendments were disposed of, the majority of which were rejected. There are still eight amendments left undisposed of and these items will be taken up on Monday, the 16th inst., when the adjourned meeting of the Senate will be held at 5 p.m.

UNIVERSITY BESIEGED BY ANXIOUS STUDENTS.

During the progress of this unusually prolonged meeting an immense crowd of students, numbering a thousand or more, assembled in the portico of the Senate House, on the grand staircase and along the footpaths for a considerable distance, as well as in College Square, in their anxiety to learn what decision the Senate had arrived at in regard to the recent examinations which had been cancelled. The crowd continued growing as the evening advanced and when finally the meeting gave over the members of the Senate on attempting to make their exit found their way barred by a solid phalanx of students, eagerly demanding to be informed what

the Senate had decided and when the examinations would next be held. The clamour they raised when they heard that this question formed no part of the deliberations of the meeting, made it manifest that they were grievously disappointed.

THE RAISING OF THE FEES.

The adjourned meeting of the Senate was held at the Senate House, College Square, on Monday afternoon, when the consideration of the report of the Post-Graduate Committee appointed by the Government of India, the report of the Committee appointed by the Senate on that subject, and the motion of Sir Asutosh Mookerjee in respect thereof, namely, that the report be adopted, was continued. The Hon. Dr. Daya Prosad Sarbadhikari, Vice-Chancellor, presided, and there was a large attendance of Fellows.

Sir Asutosh Mookerjee asked for leave to insert the following clauses in the draft regulation:—

Notwithstanding the regulations hereinbefore contained, the name of a student of the Post-Graduate classes in Calcutta, may, with the permission of the Principal of the college from which he graduated, continue to be borne on the rolls of such college; and he may reside in the college hostel or attached mess, enjoy the benefit of the college library, laboratory and other like institutions, and receive assistance in his studies from the college staff. Such student, in so far as he is a member of the college, shall be subject, in matters of discipline, to the authority of the Principal.

A student of the Post-Graduate classes in Calcutta, who is unable to attach himself to the college from which he graduated, may, with the sanction of the Executive Committee concerned, attach himself to another college, and, thereupon, the provisions of the preceding paragraph shall apply to such student.

Students of the Post-Graduate classes in Calcutta who are unable to attach themselves to a college under either of the preceding paragraphs, and who do not reside with their parents, guardians or families, shall be subject to such rules for their residence and control as may from time to time be prescribed by the Senate, on the recommendation of the Councils.

Every student of the Post-Graduate classes in Calcutta shall be assigned by the Board of Higher Studies in his subject to a particular member of the staff as tutor. It shall be the duty of such tutors (in accordance with rules to be framed from time to time by the Senate on the recommendations of the Councils), to see their pupils singly or in groups at stated times, to advise them with regard to the lectures they should attend and to their courses of reading and practical work, and to assist them in any difficulties that they may encounter in their studies.

The leave was granted.

Sir Gooroodas Bannerjee moved that the recommendations relating to the raising of the fees for the Matriculation, I. A. and I. Sc. examinations be omitted. He said that their candidates paid fees, which not only covered the expenses of their examinations but also something in addition, to enable the University to maintain itself. So far that was just. But was it just that they should be made to pay for the teaching of others—Post-Graduate students? That would be taxing Peter to pay Paul.

Rai Chooni Lal Bose Bahadur seconded the amendment. He said that it was not only unjust but it was unfair to impose larger fees, especially upon the Matriculation students.

Dr. Kedar Nath Das moved that at this stage the meeting do dissolve itself into a Committee for a few minutes to consider this item.

Sir Asutosh Mookerjee opposed the motion and said that the effect of placing it before a Committee would be to put off the evil day. The question would come on before them again.

The motion was put to the vote and lost.

Dr. Hira Lal Halder opposed the amendment.

Dr. Urquhart supported the amendment. It seemed to him that it was quite unfair that they should tax their students especially the Matriculation students, in order to make things easier to Post-Graduate students.

Dr. S. P. Sarbadhikari said that as long as it was not possible to supplement the resources at the disposal of the University by additional grants and endowments they should do nothing to kill the goose that had been giving them golden eggs.

A lengthy discussion followed, after which Sir Asutosh Mookerjee said that the proposed taxation was absolutely just. The question of poverty had been very greatly exaggerated. If they were to run that scheme they did require money, and they must find the money in that way and that way alone, there being no other way possible.

The amendment was lost.

Sir Asutosh Mookerjee's motion, that the report be adopted, as amended, was carried.

UNIVERSITY OF MADRAS.

Statement of the Concessions proposed by the Syndicate to University students enlisting in the Indian Defence Force.

1. The Syndicate is prepared to recommend to the Senate exemption from the production of the certificates required by the Regulations in the case of students who, by reason of training or service in the Indian Defence Force, are unable to comply therewith: provided such exemption is recommended by the Principals of their respective Colleges and also, in the case of the Physical and Natural Sciences, by the Professors concerned.

2. The Syndicate will recommend to the Senate the adoption of a temporary Regulation to provide that, in the case of Honours students who have enlisted in the Indian Defence Force, the period of time within which they shall appear for the Final Examination in Honours be extended to the end of the fifth year after passing the Intermediate Examination.

3. The Syndicate will grant a refund of the fees paid by any University student who applies for a University Examination and is prevented from appearing thereat on account of military duty in the Indian Defence Force.

(Sd.) FRANCIS DEWSBURY,
Registrar.

Reviews and Notices.

THE STORY OF THE INDIAN MUTINY, BY HENRY GILBERT. (MESSRS. HARRAP AND COMPANY).

Patriotism is the last resort of the scoundrel, Dr. Johnson is reported to have said. Whether it is actually so or no, it is a dangerous accomplishment in a historian. Nowhere is the danger greater than in one who would tell the story of the Indian Mutiny, where a body of misguided sepoys and other designing persons set at naught the authority of the Government of 'John Company,' and committed excesses in their hatred of 'the powers that be' at the time. Even the excesses of these misguided and evil-minded folk have been thrown into the shade by the horrors of civilized warfare in Belgium in the early days of the war at present convulsing the world.

The story of this unhappy episode in the History of India is full of difficulty. It is almost impossible to avoid an unconscious bias in the narration of the events; but the usual character of the narrative is not merely a conscious bias against the mutineers but a complete colouring of the history by the feeling against the sepoy, however much this feeling might be reasonable in those that fought against him. It is refreshing, therefore, to turn to a narrative of this unhappy episode which makes a conscious effort to hold the scales even, though the unconscious bias yet lingers and shows itself on occasions.

The book before us attempts to tell the story of mutiny with a liveliness of narration combined with a faithfulness to fact that commands approval. It is now acknowledged that the Great Indian Mutiny came about through a want of understanding of the country by the rulers then in combination with a considerable degree of ineptitude that had taken possession of the military administration. The book under review has it in Chapter XV: 'Canning himself was quite new to the country, while his Councillors, though they had spent most of their lives in the service of the East India Company, were men who had never learned anything of native ways of thinking and feeling. The "black men" whom they had ruled were beings of quite inferior nature whom it was only necessary to "govern" not to understand.' It was this want of knowledge born of a want of sympathy that had characterized some of the acts of state of Dalhousie. The irritation that it caused was the cause of the cankerous hatred that led to some of the atrocities, chiefly the worst one at Cawnpore. In the light of some of the reprisals committed by

the 'armies of retribution' the lurid glare of even this 'red terror' pales somewhat in its bloody lustre. Just to give one illustration from the same book: 'Thereafter, by summary trials and ceaseless hangings of rebels, both sepoys and native civilians, and by indiscriminate and, too often unjustifiable slaughter of villagers and firing of native hamlets, Neil imposed the terror of the British name in the minds of the inhabitants, and thus "pacified" the district to some extent.' This savage work of Neil and the still more horrible work he did by way of reprisal at Cawnpore find graphic description in the book, but he it said to the honour of the British name, that Sir Colin Campbell, immediately on arrival, put a stop to it, 'saying that it was unworthy of the English name and of a Christian government.'

We commend the book to those that wish to read this gruesome chapter of Indian History with some pleasure and get, at the same time, a graphic and fair description of the incidents that followed one upon another with tragic intensity.

SUBODHA RAMACHARITHAM, BY SISTER V. BALAMMAL, 'VIVEKASHRAMA,' TRIPPLICANE, As. 6

We have great pleasure in pronouncing that the booklet "Subodharamacharitham" now before us is a successful attempt of our talented Sister Srimati Balammal. The style is simple, chaste and elegant; the language is faultless, and the story is narrated in a pleasing style. It is highly gratifying to see that this little volume is from the pen of an Indian lady poet, who gives the lie to the popular assertion that Sanskrit is a dead language. The book can be safely introduced as a text-book in the junior classes of our High Schools. It is priced only at As. 6 so that it may be within the reach of all classes of people. We have no hesitation in recommending this book to educational authorities and schools for handsome encouragement which it deserves. The get-up of the book is all that can be desired.

DRAVIDIAN ARCHITECTURE, BY Mr. G. JONVEAU-DUBREUIL. EDITED BY Mr. S. KRISHNA-SWAMI AYYANGAR, M. A. (S. P. C. K. PRESS, MADRAS.)

This booklet of 47 pages is in the nature of an introduction to Dravidian Architecture, and has been published with a view to stimulate interest in the subject in those to whom a regular course of training is impossible.

Prof. G. J. Dubreuil has made a special study of the architecture of that part of South India extending along the Coromandel Coast from Lake Pulicat to Cape Comorin, and in the book under review he deals with the structural remains found in the Districts of Chingleput, North Arcot and South Arcot.

The Dravidian architecture owes nothing to foreign influence and has steadily progressed in its path of evolution. The master-masons constructed always according to the methods of their time with the motifs which their ancestors had transmitted to them. The methods of construction are elementary, but the details of the sculpture are very interesting and in consequence the history of South Indian Architecture reduces itself to the history of ornamentation.

Chapters 2 and 3 are devoted to a detailed description of the 'order' of Dravidian and Pallava architecture respectively. While reading these, we seem to be with a master-mason engaged in the construction of a temple. Every part of a building is explained and Tamil equivalents of the technical terms have been given. A careful and clear analysis of the Dravidian and Pallava order is attempted and the book is very interestingly written.

There is a general complaint that this noble art has been much neglected and we hope that this book would wipe out that reproach. Easy introductory manuals, such as the one we are reviewing, are the things that are urgently required and we trust that the Editor's (Mr. S. Krishnaswami Ayyangar's) hope to bring out hand-books on Epigraphy, Numismatics, etc., would soon materialise.

SACRED TALES OF INDIA, BY DWIJENDRA NATH NEOGI, B. A. (MACMILLAN & Co.) Price Rs. 2.

Foreigners are apt to think that the women-folk of India are so many dumb creatures shut up in secluded zenanas and hardly living a cheerful and interesting life. Mr. Neogi's "Sacred Tales of India" is a nice book that would tend to give an idea of the domestic life of our ladies in one of its highest bearings. Feasts, fasts and ceremonies occur almost every week in the Indian calendar, and the observances that are exclusively done by the ladies are not inconsiderable. Mr. Neogi describes twenty of such ceremonies observed in Bengal and his main object is to give out the Pauranic or legendary story connected with each. The Vratas based on the Stories of Savitri, and of

Krishna, have their counterparts in South India, and some others are observed under different names in other provinces also.

The stories related therein may prove of some use in the study of comparative folk-lore and we heartily recommend the book to our readers. It has been dedicated to H. E. Lord Carmichael and contains four nice illustrations.

THE PUNJAB, NORTH-WEST FRONTIER PROVINCE AND KASHMIR, BY SIR JAMES DONIE. (CAMBRIDGE UNIVERSITY PRESS). Price 6s.

This is one of the volumes on "Provincial Geographies of India" under the general editorship of Sir T. H. Holland, K. C. I. E. The author, Sir James Donie, writes with an intimate knowledge of the country, for he has been there as a District officer and successively rose to be a Commissioner, Chief Secretary, Financial Commissioner and finally as officiating Lieut-Governor. His accounts of the physiography, the flora and fauna, the people and the administration are essentially his own personal recollections. He seems to be living over again the happy 35 years which he devoted to the service in North-West India. The first eight chapters give a detailed description of the natural configuration of the provinces, and the succeeding three chapters have been devoted to a clear analysis of the people, their numbers, races, languages, religion and education. An admirable summary of the history of the provinces occupies 40 pages and the usual "Gazetteer" of places concludes the volume.

The book contains as many as 150 clear illustrations and this, we may say, is its special feature.

CLOUD MESSENGER.

A Critical Appreciation of Kalidasa's *Meghadūta*

By RAO BAHADUR M. RANGACHARYA, M.A.
late Professor, Presidency College, Madras.

Price Annas Ten. Postage, etc., extra.

SWAMI VIVEKANANDA—A SKETCH

By Mr. M. S. NATESAN,
Teacher, H. S. School, Trichinopoly.

Price Annas Six. Postage, etc., extra.

Srinivasa Varadachari & Co., Triplicane, Madras.

XXIII

Indian Educational Notes.

S. G. Subramania Iyer, Esq., B. A., L. T., Headmaster, S. M. S. School, Karaikudi, writes:—Some of the leading Nattukottai Chetties have started a Secondary School at Karaikudi and have been running it successfully these four years as an Incomplete Secondary School with the Third Form as the highest class. The school, known as the S. M. S. School, Karaikudi, has been receiving good financial support from the Managers, who have already endowed it to the extent of nearly half a lakh of rupees. Besides, a substantial building whose foundation was laid by His Excellency the Governor, in September last, is in course of completion and the Managers are trying their level best to place Secondary education within the easy reach of all. It has been arranged to open the IV Form in the ensuing June, with a staff of able Graduates and also to allow all fee and boarding concessions to deserving students that come from outside.

The following tuition fees are collected in respect of the following classes:—

III Standard	Rs. 8-0-0 per year	collected in 8 instalments
IV Standard	"	"
I Form	Rs. 16-0-0 per year	"
II Form	"	"
III Form	"	"
IV Form	Rs. 32-0-0 per year	"

Standards I, II and the Infant are given tuition gratis.

As for boarding, the Managers are resolved to levy very moderate charges which are fixed at Rs. 6-8-0 per boy per month. These include three meals a day and two oil baths a week besides housing. Special care will be taken to attend to the comforts of students, whose progress in all directions will be carefully looked after. It is earnestly hoped that parents will avail themselves of this opportunity and receive the full benefit of the munificence of the Chetties and give all patronage to a rising institution like ours. Such of the pupils who desire to be admitted in the school and such of the parents who may like to send their boys over here, are required to apply in person or in writing to the Headmaster not later than the 15th July 1917 as applications later than that date may be rejected, the number of seats in the IV Form being limited this year. It is a matter for immense gratification to mention here that the Inspector of Schools, VI Circle, has kindly consented to open the IV Form.

The Educational Review.

We do not know if we will be considered guilty of exaggeration and hypercriticism, if we should make the statement that the educational resolutions of the local Legislative Council have often tended to be ineffectual, by their being thoroughly vague and pointless—that is however our feeling in the matter. We are afraid, that when there are constant demands made for the appointment of Committees of officials and non-officials, the underlying cause is a real inability to make any definite and constructive suggestion, and a vague hope that a 'Committee' may somehow do good. It was difficult to resist this feeling when the request was made at the last meeting of the Council, that a Committee should be appointed to enquire into the methods of expenditure of the lump grant of four lakhs made by the Government of India for education. The grant has been assigned for the opening of new elementary schools and the training of teachers, and it was open to the member to make any definite and useful recommendation in the matter; for instance, that the proportion of expenditure over the two heads be fixed in such and such a manner, paying more attention to the opening of new schools than to the training of teachers or *vice versa*; or, he could have pleaded the cause of certain backward districts for more than proportionate grants. But the request for a Committee merely avoids the responsibility of a definite suggestion and does not help educational advance very much. May we not also plead for a sense of proportion in such cases, and say that the spending of four lakhs of rupees does not require "a Committee of officials

and non-officials to enquire into the methods of expenditure." A similar criticism applies to the Resolution of the Hon. Mr. A. S. Krishna Row, requesting Government to encourage the development of Vernacular Scientific Literature. The need for the development of scientific literature in the vernacular is acknowledged on all hands, and the Hon. Mr. A. S. Krishna Row himself could not have expected the Government to oppose the expression of such a pious and benevolent wish. It would have been more useful however to ask definitely for setting apart a certain sum in the Budget for bonuses to vernacular scientific literature, or to recommend that science should be taught in the vernacular up to certain classes in schools, or make any such definite suggestion with possibilities of immediate, practical execution. The only other educational resolution was on the subject of Boy Scouts and Government had no hesitation in giving their support to the movement—the resolution of the Imperial Government on the subject having also stated definitely the policy to be adopted by Government in the matter.

Several notable anniversaries of educational institutions have been celebrated during the month. The Hindu High School, Triplicane, continues to hold a premier place among Secondary Schools in the city of Madras, and eloquent testimony was borne to another year's useful work at the anniversary, the other day, with H. E. Lord Pentland in the chair. Reference was made to the notable introduction of the Boy Scout Movement into the institution, and we are delighted to know that twenty-four boy scouts have already been put forward with

their own scout-masters. An idea of the magnitude of the work turned out by the institution may be gathered from the fact that the strength on the day of the anniversary was 1672. We congratulate the Secretary, Dewan Bahadur M. O. Parthasarathi Iyengar, who is crowning the years of his distinguished official service with useful public work, on the success of the institution.

Rao Bahadur M. A. Parthasarathi Aiyangar then made a handsome donation of Rs. 2500, to be utilised for the improvement of the Hall which bore the name of his father Rao Bahadur M. A. Singrachariar, the founder of the school. Rao Sahib C. Ramanujam Chettiar in his usual characteristic manner, then offered to award free scholarships to three poor students of the school who after successfully finishing the School-final course this year might desire to study for the College course up to the B. A. Pass or Honours degree.

With the generosity of Rao Saheb C. Ramanujam Chettiar and the exertions of the Secretary of the School Committee, Mr. V. Desikachariar, B.A., B.L., the High School in Purasawalkam associated with the philanthropic name of the former, presented the report of a year's good work, at its anniversary function, with the Hon'ble Sir Alexander Cardew in the chair. Away in the mofussil, on the occasion of the anniversary of the Sri Mahant's High School, Tirupati, the Hon'ble Mr. Justice K. Srinivasa Iyengar, who presided, put in an eloquent plea for improving the status of the teacher, and asked not only for an improvement of his financial prospects, but also for his wider recognition in society.

The recent inauguration of the School of Oriental Studies. Oriental Studies in London to serve the needs of India and the British Empire, marks an important step in the development of Oriental Studies. The need for such an institution has been a long-felt want, with the knowledge of oriental languages desirable not only for efficient work in the great civil services of the East, but also for success in commercial life. His Majesty King George V, after his memorable Indian tour, pleaded for such facilities and with the exertions of the later Lord Cromer and Lord Curzon, distinguished scholars, who have themselves been eminent pro-consuls of the Empire in the East, the institution is an established fact to-day. It is of course well-known that the Universities of Oxford and Cambridge have during the last few decades provided some facilities in the direction, but the new institution will easily surpass them, in the magnitude and quality of its arrangements, and will form a powerful centre for oriental studies in the Empire. As has been observed by some of those responsible for its inauguration, it will serve as a meeting place for the East and the West. A question of some importance in connection with its work, affecting the training it will afford civilians coming to India, has been raised by that distinguished scholar of Indian languages, Mr. J. D. Anderson. While recognising the great value of the classical languages of the East, Mr. J. D. Anderson pleads for a study of modern Indian languages, with the speakers of which the civilian will come into direct contact, and some of which at least possess flourishing literatures of great value. The *Educational Supplement* of the *London Times* has support-

in India claim to be more advanced than the Hindus, and it is difficult not to feel impatient with the demand, for preferential treatment in the matter. As a measure of practical expediency again, the community will probably find it easier to get a more liberal constitution by accepting the present offer, and demonstrating their fitness for a better one, and it will not be very early indeed before they are able to do it. They have been sitting with folded hands and a sullen spirit, while other University schemes have seen definite fruition. In the Mohamedan Anglo-Oriental College, Aligarh, they have fortunately a very good nucleus for organising a University College and we trust no more time will be wasted in taking the necessary action for bringing the University into existence.

The Imperial Government have issued a circular of considerable practical interest on the subject of Technical Education, reviewing the recommendations of Col. Atkinson and Mr. Dawson, who were asked to report on the relations of technical institutions and employees of labour. The Imperial Government approve of the main thesis of the Report, that increased attention should be paid to practical training. We have had occasion to notice several complaints with regard to Technical and Industrial institutions in this country, that their products have not shown much manual skill and deftness of hand, when brought to the practical test of action. They are often holders of certificates and no more, and employers seeking capable workmen of practical ability, have considerable hesitation in engaging their services. Every effort should therefore be made to remove this failing, and the technical institutions must be centres of thorough practical training and work, more

than anything else. It is however a matter for regret that the Imperial Government do not find their way to agree with the Committee in the matter of two good recommendations. The excellent suggestion of the appointment of a Controlling Officer for all India with a Central Employment Bureau is brushed aside on the ground that Provincial Governments are better fitted to deal with local wants. The Imperial Government evidently forget that the Provinces are not self-contained industrial units, and they are sure to benefit themselves immensely by drawing upon one another's resources, experiences and special facilities for Technical Education. A Controlling Officer for the whole country will serve to help a concentration of attention on technical and industrial matters, and an Employment Bureau would be eminently desirable in the interests of everybody concerned. The Committee was again right in condemning the system of industrial schools now ordinarily prevailing, mainly on the ground that the smaller and easier nature of manual work in such schools unfit the pupil for the hard manual labour which he must undergo in a workshop under commercial conditions. It would be no exaggeration to say of the present Industrial Schools, that they all display a mere amateurish interest in the subjects, and are fit only for exhibitions on occasions of gubernatorial and other visits. One rarely sees in them the active workman, who may be expected to face the strenuous trials of an industrial life with some chances of success. It is pleasing to know that the question of factory schools has long occupied the attention of the Government of India, and they say it is one to which they attach the greatest importance. Proposals would also seem to have been made for legislation in order to

induce employers to provide instruction for children connected with factories. The Imperial Government claim, that the main recommendations, interpreted in this circular represent the best system available for placing Indian talent in the way to obtain industrial employment and they trust that in acting on the lines of these recommendations, the Local Governments will receive the support of local authorities and industrial firms who are in a position to give assistance.

The new Indian member of the Madras Executive Council, the Dewan Bahadur Rajagopalachari on Education. P. Rajagopalachariar, M.A., B.L., C.I.E., has always been known to be a genuine friend of educational interests and an able champion of the teacher. His regime as Dewan of Travancore was marked by striking educational advance in the State, and an effective improvement of the pay and prospects of the teacher in every grade of the Department. With such a good record of work for education behind him, and with his strong combination of experience, culture and common sense, he was eminently fit to give the advice which he gave the other day to teachers at the Teachers' College, Saidapet. Though the speech tended to become somewhat of a homily in some places, we have no doubt it would not be misunderstood, as all that was said, came from one who was moved by a real anxiety to advance the calling of the teacher. It is characteristic of the eminently practical turn of his mind that he should have said that the teacher must not start life with elaborate maxims of conduct, but if he went on doing his work to the best of his ability, there would not be much difficulty in determining as to what exactly his duties were. He would find that after a

spell of work he had done the correct things. He dwelt at considerable length on the difficulties and responsibilities of the teacher. He was responsible not only for his own work, but also for the progress and good behaviour of his pupils. It was somewhat disheartening to be in touch with batches of students only for brief periods, and more efficient results could of course be secured by keeping the same set of students for some considerable length of time under one's attention and care. It was to a real danger that the Dewan Bahadur drew attention when he said that while the teacher should keep up his scholarly instincts, more than people in other walks of life, he must also avoid becoming inelastic and intellectually rigid. We have always pleaded for the teacher's active participation in the life of the community and we are glad he also laid special emphasis on it. It was necessary, according to him, to understand the pupils entrusted to him better, and to acquire support for his work from the community and we will add it is also due to the prestige of his profession and to the complete fulfilment of his abilities and character. "The teacher could never do his work satisfactorily unless he kept himself in touch with environment by which he meant the local officials and non-officials, busy-bodied men, newspaper writers and the whole lot of men, good, bad or indifferent." We feel thankful to the Member of Council for drawing attention to the disastrous effects of not paying sufficient respect to expert opinion in educational matters, and of the interference with education of those who knew nothing about it. He put it in very vivid language when he said that "it was most unfortunate that education was supposed to be a common

meadow in which all cattle from the neighbouring fields could be allowed to graze." He could not hold out on the occasion any message more hopeful than that they should reconcile themselves for the present at least with that condition. But we hope he will do everything in his power as a member of Government to advance the interests, influence and prestige of the teaching profession in Southern India.

Sufficient attention has not been drawn in this country to the **An Educational Programme** issued to the English nation by the members of the Workers' Educational Association. It may be said, in effect, to represent the views of the great masses of the people, the interests of labour in the country, and embodies recommendations of the most liberal and far-reaching kind. We have no doubt that it will be considered radical in some quarters even in England, and we are afraid it must be impossible to invoke any sympathy with it from the rather slowly-moving administrations in India. The Programme may however be kept in view, as an advanced ideal towards which even India must move with the generations to come. It lays down at the outset the broad principle of *free education, through all its stages, including that of the University*. Side by side with an increase in the age for compulsory attendance at school, it pleads for an extension of education to the smallest children, even to those between the ages of two and six, by the starting of special nursery schools, the education in them being mainly directed, to the cultivation in the children of good physical habits and healthy bodily development. Similar demands are made with regard to other aspects of educa-

tion and most of them indicate reforms of the highest value. Such are the plea for the use of the open air as much as possible; the increased use of the playground; the encouragement of at least the senior boys at school and students at College, to manage their own affairs in several matters; the compulsory maintenance of medical and dental service by educational authorities; the guarantee of adequate feeding of children coming to school; greater facilities for the training of teachers and the development of public libraries and their more intimate association with school and college life. The scheme is thus not devoid of lessons to India though it is yet lagging far behind.

The authorities of the Indian Women's University have favoured us with a copy of the

Report of its first year of existence. Considering that the scheme was adumbrated only about this time last year, the organisers of the University deserve the heartiest congratulation. For one thing, the University has come into existence and there is no waiting for constitutions or endowments, for aristocratic patronage or Government approval. The Electoral Roll of the University is fairly large and more than a thousand and two hundred names are there. The first year University class is now working, though the strength is only four. The Syndicate has resolved upon awarding special scholarships from the next year and we have no doubt they will serve as a real attraction. As our readers are aware Dr. Sir Bhandarkar, LL.D., the distinguished Oriental scholar is the Chancellor of the University and the Hon'ble Mr. Paranjpye, M.A. of the Fergusson College is the Vice-Chancellor. When we add that Prof. Karve who has already a splendid record of philanthropic service behind him, is its active worker, the prospects would seem to be quite bright.

The Educational Review

A Monthly Record for India.

VOL. XXIII.

MAY 1917.

No. 5.

All literary contributions, books for reviews, newspapers or magazines, sent in exchange, &c., should be addressed to the Editor, No. 4, Mount Road, Madras. Articles and communications intended for publication in the succeeding issue should, as far as possible, reach the Editor not later than the 20th of the month. The Editor solicits contributions on all subjects of educational interest. Stamps should accompany the MS., if the writer wishes it returned, in case of non-acceptance. The Editor can in no case hold himself responsible for accidental loss.

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A FEAST OF COLOUR.*

By PRINCIPAL P. SESHADRI, M.A.

'PAINTING is silent poetry and poetry speaking painting,' said the Greek Simonides and it is therefore no strange transition from the review of the volumes of the *Memorabilia* devoted to Song, in the last number of the *Educational Review*, to this article on other numbers of the series, comprising the work of some of the greatest masters of painting in Europe. Ruskin had a pious horror of the grave consequences of the cheapening of works of art, consistently with other similar idealistic notions of his own, but who can deny the educative and æsthetic value of booklets at a shilling each, affording glimpses of some of the best art of the world?

* *Memorabilia*: The Adoration of the Magi; The Flight into Egypt; The Visitation of Mary; Portraits of Christ; Twelve Scenes from the Life of Christ; The Last Supper; Saint George the Martyr; Saint Francis of Assisi. (Reprinted from publications of the Medici Society. Oxford University Press. 1s. net each.)

XXIII

In spite of the notions occasionally cherished of the antagonism of Puritanism with Art, it has been recognised that religion has inspired enthusiasm and genius in the artist of every period of human history. From the work of the early masters who chiselled the marbles of the Parthenon or the numerous groups of immortal statuary which have found resting places in the Vatican and other art galleries of Europe, through the art of Raphael and his imitators in later centuries, to some of the sacred painters of our own day, there has been an unbroken tradition of this association. The volumes that come under this review are all devoted to sacred subjects, half a dozen dealing with various aspects of Jesus Christ and two bringing us to the legend and romance of Saint George the Martyr, and the beautiful and inspiring life of Saint Francis of Assisi.

There are the three Eastern sages guided by the star to Bethlehem in the *Worship of the Magi*:

A star, not seen before, in heaven appearing,
Guided the wise men thither from the East
To honour Thee with incense, myrrh and gold;
By whose bright course led on they found the
place,
Affirming it thy star, new-graven in heaven.*

They are come in their gorgeous Oriental costume, with flowing robe and heavy turban, and the Virgin-Mother with the child appears, heavily weighed with the austere responsibility of the birth of the Prophet. It is interesting to compare the variety of the representations. Giotto's fresco is simple and dignified and even the animals on the left seem to appreciate the spiritual worship that is proceeding before them; Don Lorenzo, Monaco and Gentile Da Fabriano are rather too full of details; Masaccio who has often been credited with the revival of the Florentine School of Painting in the fifteenth century justifies the praise bestowed on him by Vasari; Fra Angelico's is one of the best in the series, with the star dominating the background; Gozzoli's is more a pageant than a spiritual scene; Mantegna's must be pronounced a failure with the rocks as big as polar icebergs at the back, while in a short compass Botticelli has drawn a vivid contrast between the subdued spiritual fervour of the Magi near the person of the Saviour and the confused agitation outside.

The story of the *Flight into Egypt* has naturally furnished excellent material for romance of incident as well as scenery. The actual idea of the travelling is suggested best in the picture of Gentile Fabriano; Fra Angelico reduces his representation to the simplest possible details; Corregio adds a very fine human touch, by making Joseph hand to the child dates

from the palm-tree, behind which the ass is fastened to a stump; Carracci and Lorraine subordinate the incidents entirely to the landscape and one wonders if they are dealt with in the picture at all.

The Visitation of Mary, the story of how when she entered into the house of Zacharias and saluted Elizabeth, the babe leapt in her womb—narrated in the book of Luke*,—is not one that lends itself to any great artistic appreciation, especially at the hands of the Masters of the Renaissance. A single situation, relating to only two characters, not even capable of much visible dramatic expression, gives no scope to the painter, and even Raphael has failed. The only relieving circumstance is that some doubts have been expressed with regard to the genuineness of the picture. Luca Della Robbia's treatment of the theme is however very effective, carrying our minds to the masters of Ancient Greece.

There is probably no more difficult subject in portrait-painting than the representation of a great prophet, bringing out his spiritual eminence and the twelve portraits of Christ from early Christian times to the Renaissance, deal with it, with varying degrees of success. Most of them are however imperfect, due partly to the physical circumstances of the representations and partly to the want of artistic development itself during the early period. In his Introduction to the booklet, Mr. G. F. Hill is forced to concede that the reader must not expect to find modern ideals of beauty reflected in these efforts of a primitive devotional art, and there is no use pursuing the subject further. Without any desire to assign the distinguished Indian artist of

to-day, Abinandranath Tagore, C.I.E., to the ranks of great masters of painting, it may be said that his Representation of Buddha, is a very successful treatment of a kindred subject. The great prophet of the philosophy of *Nirvana* sits there, lost in profound contemplation, the mystic light of the evening sun dominating the whole scheme and furnishing an admirable background.*

Duccio is not so well-known to the layman as Giotto, but he had made his reputation as a great artist when the latter was only a little boy, and his is the strongest influence in Sienese painting. The story of the sensation caused by his panel-painting of scenes from the life of Christ, the altar-piece known as the *Majesta* in Siena, is described by Vasari and is worth repetition: "For which reason this work was so great a marvel among the people of that time, nothing better than it having been seen heretofore, that it was carried from the house of Cimabue to the Church with much festivity, to the sound of trumpets, in most solemn procession, and he was greatly rewarded and honoured therefor.

.....The shops were shut; and the Bishop ordered a great and devout company of priests and friars with a solemn procession, accompanied by the Nine Signori and by all the officials of the Commune and all the people; and all the more worthy were ranged in order near the said picture with lighted candles in their hands; and then behind them were the women and children very devout. And they accompanied the said picture as far as the Cathedral, making the procession around the Campo after the usual manner,

* See the Frontispiece to the *Myths of the Hindus and Buddhists*, by Dr. Ananda Coomaraswami and Sister Nivedita. (Harrop).

ringing all the joy-bells for devotion to so noble a picture as this is.....And all that day was spent in prayer with much giving of alms to poor persons, praying to God and his Mother, who is our advocate," etc. The twelve scenes from the life of Christ are all after him and include the Temptation, the Healing of the Man Born Blind, The Raising of Lazarus and Judas agreeing to betray Christ. The first is the well-known scene described in *Paradise Regained*:

To whom thus Jesus: "Also it is written,
Tempt not the Lord, thy God." He said and
stood;
But Satan smitten with amazement fell.*

The expression of blindness on the face is very well done in the second, but the third is somewhat marred, and even looks slightly grotesque by the stiff corpse standing upright in the grave. Judas agreeing to betray Christ is probably about the best in the series—it is not only Judas, but every member of the group that is painted with great care and success.

Leonardo da Vinci has made the subject of the Last Supper the most famous in sacred Art and it is difficult for one to think of it disassociated from his brush. There are representations by others too reproduced here, but it is enough to say that they are all earlier and imperfect attempts at handling the subject, or later imitations of Leonardo of a decidedly inferior type. An exception may be made in favour of Titian's masterpiece on the subject, but it is necessary to remember that the picture has suffered considerable mutilation. When the picture arrived for the Refectory of the Escorial in 1564, after seven years of labour, the monks

* Book IV, Lines 560-562,

* *Paradise Regained*, I—249-254.

* St. Luke, I—39-45.

finding it was too large for the wall, cut off a large portion of the top of the canvas, destroying much of the architectural setting. It was probably a mistake to have shown Leonardo's picture, once only on a single page, as a whole, the numerous figures in the small size, not being sufficiently clear for thorough artistic appreciation. In addition to the general group, the disciples might have been shown in sets, to enable a detailed study of the admirably expressive faces, as for instance in Dr. George Gronan's life of Leonardo in the *Popular Library of Art* series. Christ is there shown by himself on one page and so also the Apostles by groups, Bartholomew, John and Andrew; Matthew, Thaddæus and Simon; Thomas, John and Philip; Judas, Peter and John. Every face is a study by itself, justifying the glowing eulogies that have been bestowed on his art by such distinguished critics as Goethe, Ruskin and Walter Pater. Ruskin summed up his praise in the words that his pictures were "incapable, in their way, of any improvement conceivable by human mind."* The very process of his art was an effective indication of the excellence of his achievement. It is well-known that he relied entirely on his inspiration and would not even touch the brush when he was not sure that the impulse of the creative artist had awakened in him. As Walter Pater puts it, "But Leonardo will never work till the happy moment comes—that moment of *bien être*, which to imaginative men is a moment of invention. On this he waits with a perfect patience; other moments are but a preparation or after-taste of it. Few men distinguish between them as jealously as he.

* *Modern Painters*: Part II, Section I, Chapter 7.

Hence so many flaws even in the choicest work. But for Leonardo the distinction is absolute, and in the moment of *bien être*, the alchemy complete: the idea is stricken into colour and imagery: a cloudy mysticism is refined to a subdued and graceful mystery, and painting pleases the eye and satisfies the soul."* As for the picture itself it is one of the world's greatest monuments of art. One wonders if Leonardo could have divined at all the glorious future that awaited his picture when he began painting it on the damp wall of the refectory oozing with mineral salts, in the low gloomy Dominican Church of Saint Mary of the Graces, at the bidding of Ludovico who was in one of his constitutional paroxysms of religious feeling, this time due to the death of his Duchess Beatrice in child-birth. An account of the romantic vicissitudes of the picture may be read in Goethe. But as Pater said: "Other artists have been as careless of present or future applause in self-forgetfulness, or because they set moral or political ends above the ends of Art; but in him this solitary culture of beauty seems to have hung upon a kind of self-love, and a carelessness in the work of art of all but art itself. Out of the secret places of a unique temperament he brought strange blossoms and fruits hitherto unknown; and for him, the novel impression conveyed, the exquisite effect woven, counted as an end in itself a perfect end."†

When Dante and Virgil reach the fourth heaven of *Paradise*, which is that of the sun, they meet St. Thomas of Aquinas who entertains them with an account of the life and doings of the Saint who

* *The Renaissance*: Leonardo da Vinci.

† *The Renaissance*: Leonardo da Vinci.

Through thirst of martyrdom, stood up
In the proud Soldan's presence and there
preached
Christ and his followers *

and that brings us to the next book in the series, containing twelve scenes from the life and legend of St. Francis of Assisi, after Giotto. One of the illustrations is the incident mentioned in the above lines, St. Francis offering to enter the fire and challenging the Moslem divines also to accept the ordeal if they claimed to demonstrate the purity of their faith. They are seen leaving the court on the left of the picture and St. Francis stands with a visible expression of the strength of his faith in his countenance. The other well-known episodes are there too, his renunciation of the world, his receiving the confirmation of his order from the hands of Pope Honorius, and the touchingly beautiful incident of his preaching to the birds. As represented in the last picture, he must have been speaking the well-known words addressed to the birds: "My brethren, praise God who created you and clothed you with wings and feathers to fly and gave you the purity of air and food that you may live." The birds are a faithful representation too of the account in the story, for we are told that as he spake these words, the birds were wondrously attentive, stretching their necks and opening their wings and beaks towards him, as though they understood his words; and he with much fervour passed through the midst of them, and so near that he touched them with his cloak, and none moved until the blessed Francis gave them his blessing and made over them the sign of the Cross, saying to them 'Depart';

* Dante: *The Divina Comedia*: Paradiso, Canto XI.

and when they had leave they all departed together.

On the hard rock,
'Twixt Arno and the Tiber, he from Christ
Took the last signet, which his limbs two year
did carry*

and it was not to be expected that such an episode could escape treatment at the hand of Giotto. We have it, with an atmosphere and background eminently suggestive of the deep spiritual significance of the legend. Giotto has been called the greatest of religious painters, but his special appeal to the modern student of art lies in an aspect of his genius to which attention has been drawn by Ruskin, "his practical common sense, with an unerring instinct for seizing the real critical moment of a scene of action." It is responsible for his complete freedom from the grotesque sentimentality which often mars such religious work.

There is probably no legend more widely current in Western Europe than that of St. George slaying the Dragon, and it is curious that the representations of the subject should be so poor in the volume devoted to it in this series. St. George is an easy enough subject for generations of painters familiar with the drawing of pious and war-like knights and the most hypercritical person will probably find no flaw in the representations of the Knight of the Red Cross here. But it is difficult to understand the signal failure of all the painters of the period in portraying the Dragon, which looks in most of the pictures like a strange combination of a grotesque kangaroo with an ugly lizard and does not evoke any sense of fear or even remotely suggest miraculous power on the part of the slayer. Much of the heroism of

* *Divina Comedia*: Paradiso, Canto XI.

the story is undoubtedly lost by this feeble presentation, which is in pathetic contrast to the forcible descriptions in poetry. Out of the large number with which every student of literature is familiar, we will mention only one, the famous passage in Canto XI of Book I of Spenser's *Faerie Queene* where St. George too is slaying the Dragon. He lies stretched upon the sunny side of a great hill, himself like a great hill; he comes

Half flying and half footing in his haste,
That with his largeness measured much land,
And made wide shadow under his huge waste;*

he is armed all over with plaited coat of steel which could not be harmed 'with dint of sword, or push of pointed spear'; his huge long tail is wound up in hundred folds; whatever touched his ravenous paws, with its cruel rending claws met with death; his iron teeth were dripping blood of late-devoured bodies:—

His blazing eyes, like two bright shining shields,
Did burn with wrath, and sparkle living fire:
As two broad beacons, set in open fields;
Send forth their flames far off to every shire
And warning give, that enemies conspire
With fire and sword the region to invade;
So flamed his eyes with rage and rancorous ire†

Turning to the pictures in the book one might exclaim with a very much keener sense of contrast than Hamlet could have had in mind: 'Look here, upon this picture and on this.' You do not discover, with any amount of effort, a single element of the sublimity absolutely necessary for such a picture. Mr. Hill, the editor of the pictures, is disposed to attribute the failure, to the fact that palæontology was then a science unborn, but then we thought that literature furnished

sufficient material even from early classical times. The point elaborated by Lessing in *Laocoon*, of the difficulty of representing the fury of raging action in painting and sculpture, and its peculiar appropriateness to poetry, may also partly account for it, but it is still inexplicable, especially with the name of such an eminent master as Raphael on the included list. We will only say that the failings of the masters are probably as baffling of analysis as their genius.

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* The *Faerie Queene*, Bk. I.—Canto XI.

† Spenser: *Faerie Queene*, Bk. I, Canto XI.

A NOTE ON THE VALUE OF EDUCATIONAL IDEAS.

'Whatever the mind perceives in itself, or is the immediate object of perception, thought, or understanding, that I call an idea.'—JOHN LOCKE.

CHRONIC dissatisfaction!—and we can picture the rest. The eyebrows are knit, and the air tingles with anxiety. One is conscious of obsession by a superior power, but there is no way of escape, because one does not know which way escape lies. That, in a few words, is the mentality, objectified, which an inspection brings with it, when the Inspector is a man of no ideas. Teachers are either 'incompetent' or 'fair,' results 'bad' or 'fair,' and the Inspector's 'general impression with respect to the efficiency of the institution' is a catalogue of the school's needs, never an appraisal, in so many words, of the institution's worth. How can teachers evolve out of this vagueness any clear conception of the real value of the work they are doing?

And yet the well-known sinister misgiving continues to linger in their minds when the subject of educational ideas is discussed in the abstract. In all conscience it is a fine demand, the demand that one should be 'practical'; yet surely it is a truism that minds outgrow the 'practical' stage, and that speculative thought is a duty imposed at least on all teachers who have received a college education. Speculation too can be practical; as Prof. Adams puts it, we soar to the clouds in order to come down to the earth again. But all this aside can we doubt at this present time, when we see the havoc wrought by philosophical conceptions, that there is much power locked up in fundamental conceptions, and that academic discussion is not all moonshine? Base our systems of thought we must on fundamental conceptions, and it is the investigator who isolates the germs of thought who proves the most effective thinker, even in 'educational bacteriology' (if the expression may be permitted) experience proving the truth of Pasteur's

dictum, "life is a germ, and a germ is a life." For the dealer in 'hard facts' deals out hard facts—disconnected suggestions, whose number may be legion; the thinker gives the silken thread which enables one both to enter and to retrace one's steps from the labyrinth of thought. The directions of the former are a mere cryptic direction which one must accept on trust, of the latter (like the utterances of an Edward Thring) a permanent possession. The one type of thinker is loud in his dogmatic assertions that such and such things are 'old-fashioned'—that tots should not be set in Arithmetic, that copy-writing is an anachronism, that the term 'object-lesson' is a misnomer, and so forth; the other type seeks to interpret, not to destroy; his wisdom spreads with the subtle stillness of light, and his principles remain a centre of light and power in the mind. It is a few such principles as these that teachers need, principles by means of which to interpret the products of experience and to suggest new lines of enquiry; to produce, in short, the attitude of mind implied by the term 'resourceful.' It is perhaps not a little remarkable that an obituary notice in the *English Journal of Education* of so great an educationist as the late Dr. Fletcher of the Cambridge Training College concludes with the following observation—"He was] one of the chosen who upheld the claims of education as a science, and have themselves learned the doctrines that they preached." (The italics are ours.)

To pursue our argument a little further. Our business as teachers is to convey clear ideas to our pupils. All ineffectiveness in teaching amounts just to inability on our part to convey clear ideas. Now before we can convey clear ideas we must be clear in our own minds as to what the ideas are we wish to convey, and what conditions are favourable to the conveying of those ideas. In the teaching of Elementary Arithmetic, for example, reflection has taught us that it is not mere figures that we should teach,—for that develops

(of the fingers) rather than brain,—but the science of Arithmetic in a form in which it can be readily assimilated by our pupils, having regard more particularly to their age. Our aim is to give an intelligent mastery of the processes of Arithmetic, and that taste for evaluation in general in which the educational value of the science lies. How can all this be done without independent thought of some kind, and of that fine discernment which can see in the product the process, in the defect the disease? And to come back to our 'practical' Inspector, of what use is it to a teacher (as a London County Council Circular observes) to be told that the Arithmetic of his class is poor,—for he knows it well enough himself,—without being told at the same time what the root cause of the weakness is? Want of time cannot absolve an Inspector from the duty of discovering the cause of the weakness, for departmental instructions require that his instructions should be of a 'constructive character.'

The fact of the matter is that it is not uncommon to find the term 'practical' being used to 'cover' amateurishness in one who lays claim to professional knowledge—while a moment's reflection shows that even experience is no substitute for the professional frame of mind, at all events not in one who is expected to foster and direct thought, and certainly not to confound it.

Would that our teachers had more of the professional pride which has driven teachers in England to start their Teachers' Registration Council! So might they be more ready to admit the great value of educational ideas.

E. H. ANDERSON.

THE VALUE OF READING, AND HOW TO TAKE A READING LESSON.

READING is a complex art. In the earliest stage it simply involves the visual recognition of words, the component elements of a language, and connecting them with the images they stand for; and in the advanced stage reading implies the comprehension of the connected sense of a passage. It will be seen, therefore, that reading in the earlier stage is more or less mechanical, and in the later stage it is intelligent. In the present paper we take note of both the implications of the term.

The importance of the mechanical aspect of reading consists in its equipping the scholar with the most essential, although the crudest sort of a passport for participation in the world's civilization. Through a vocal symbol, the child recognises a visual symbol which a once calls up a mental symbol. These

visual symbols or written words are the units of a language. The importance of the other aspect of reading is manifold. In the first place, our own individual experience cannot supply us with any considerable amount of knowledge. We stand in need of profiting by the experience of others. Reading is an instrument whereby we can make ourselves acquainted with things that lie beyond the range of our own observation. We can hold communion with those that are absent and can master the knowledge and experience of those that have gone before us. Thus reading has a wide field for imparting general information. In the second place, reading affords mental discipline. It trains the scholar's intelligence, memory, observation, judgment and reasoning. Lastly, reading induces

What reading implies.

Its importance:

i. In the mechanical side.

ii. In its intelligent aspect.

clear and accurate expression. It helps the scholar to express himself clearly.

The whole word is a group of letters. The adult does not attend with a separate effort to each individual letter. He grasps in a single

act of attention a whole word or a group of words. With him, the visual perception

of the word and the reproduction of the idea have become almost automatic. But the child fares differently. Common experience tells us that the child begins reading letter by letter. Failure to read a word correctly at the first attempt leads him to venture one wild guess after another, till, after numberless trials and errors, he finds out the correct pronunciation. At this stage

the point that calls for the special attention of the teacher is to impress on the child's

mind the true vocal function of each letter. He should, from the very beginning, attempt to connect the right sound with the right symbol. The association of each letter with its power, of

each group of letters with the new sound, and then with the idea represented is a most

difficult process, and taxes the teacher's ingenuity to the utmost. This is laying the foundation-stone in the acquisition of a language, and it is desirable that it should be laid by a "master mason." A second difficulty is that of form-perception. The lessons in drawing may be utilized to remove this difficulty. Let the children draw the forms on their slates. Those easiest of discrimination should be first taught; those involving nicer discrimination should be reserved for a later stage. Another difficulty the teacher experiences and has to overcome is the irregularities of pronunciation in the English language. A letter has got various pronunciations and "BUT" and "PUT" are never pronounced alike. The skilful teacher should pay

XXIII

special attention to these initial difficulties, and try, as far as in him lies, to make the path of learning smooth for the young scholar.

Since the world turned its attention to the question of education, many different methods of teaching reading in its earliest stage have been advocated—views have differed, giving rise to different schools who have

agreed only in condemning the old 'orthodox' method of teaching to read by conti-

nual spelling. The various methods bifurcate into two directions, viz., the analytic and the synthetic. The analytic method aims at making the child read words as wholes from the first, and

only later, analyse these wholes into their constituent letters. This method has its

sub-divisions, e.g. the Look-and-Say method and the Syllabic method. The synthetic method on the other hand starts with the letters and advances to the words by a synthesis of the letters. This method branches off into the Alphabetic, the Phonic and the Phonetic procedures. Without entering into a detailed discussion of the comparative merit of all these

various methods which will unnecessarily lengthen this paper we propose to discuss briefly and jointly the arguments for the two main groups. Professors Judd and Barth definitely recommend the analytic method on the ground that both the adult and the practised child quite certainly do actually read words as wholes; and that, therefore, to teach the beginner to read letter by letter would seem to be needlessly cultivating a habit that must, in after years, be broken through. Professor Meumann on the other hand insists that the fact that the child has a natural tendency to read words as wholes and is far too prone to read by guessing is only an argument in favour of the synthetic method with the beginner, which enforces close attention to

word-elements, and so makes for exactness of perception. Amidst these conflicting theories it would be difficult to come to anything like a definite conclusion. But the Analytic method recommended. Look-and-Say method appeals most to the child and is supported by the sound psychological principle that we should come to parts from wholes. Moreover, the child on entering school already possesses the vocal and the mental symbols. The Look-and-Say method recognises this, and by adding the visual symbol firmly cements it to the others. A skilful teacher with the help of this method can make alphabet-learning easy and interesting to children.

We now come to the discussion of the other aspect of reading, *viz.*, intelligent reading as

Value of intelligent reading.

carried on by advanced children and adults. We are here concerned not simply with

the visual recognition of words with reference to the ideas they represent. We are to suppose that the child has mastered the mechanical difficulties of the art of reading, and is in a position to grasp the connected sense of a passage. He has been thoroughly initiated into the mysteries of the art in its initial stage. He now enters on the intelligent stage. He has made a definite move towards participation in the world's civilization. Here there is a freer interchange of feelings and ideas. Since language is a means of intercommunication, since it is a social product removing the fundamental isolation of the human mind, since, moreover, it is a means whereby a man can develop the artistic and æsthetic sides of human life, reading at this stage becomes to the child a very important and interesting process, demanding from the pupil much care in its cultivation, and from the teacher much skill in its imparting. The teacher should now pay particular attention to the following points:—

(a) Articulation, *i.e.*, making each word sound

Points calling for the teacher's special attention,

distinctly.

(b) Enunciation, *i.e.*, making each word sound *properly*.

(a) and (b) make up what is known as pronunciation.

(c) Tone—This should be middle. The pitch should neither be too low, nor too high.

(d) The manner of reading. A mechanical drawl should be avoided.

(e) A laboured style should be avoided.

(f) The reading should be intelligent, *i.e.*, the boy must understand what he reads, and the hearer should also, from the reading itself, follow the sense of the passage read.

(g) Rushing on must be avoided; insist on slow reading.

(h) Proper regard must be paid to the pauses and stops.

To secure these objects the teacher may adopt various methods in giving a reading lesson to a class of boys, but the particular method he should follow will be largely determined by the object he has in view. Some of the

Various methods advocated.

most important methods advocated are shown below:—

(1) Individual reading.

(1) Individual reading. After due preparation, each boy in succession should be asked to read a paragraph with proper regard to pronunciation and punctuation. The boy should be asked test questions to see that he understands the sense of what he reads. This sort of reading secures everything that the teacher aims at. (2) The

(2) Collective reading.

next method advocated is that of simultaneous or collective reading. It means

that all the boys should be allowed to read together. It is defective in so far as it does not attend to individual needs; but it economises time, and gives more practise to boys than in individual reading. To be of real help to the pupils it should be controlled by the teacher.

(3) Unseen reading is to practice boys in

(3) Unseen reading.

reading passages they have never read. This method exercises the boys' powers of

reasoning and understanding. But this should not be the everyday method of the teacher. Now and then he may give his class unseen and unread passages to test what real progress they have made in intelligent reading. (4) The teacher

(4) Pattern reading. may give pattern reading to his boys. The teacher

generally, but very often a good reader selected from the class should give the model. After three or four boys have read, the model should be given. The teacher should first see what mistakes the children are apt to commit, and should then give the model. There is no fixed time for giving the model, beginning or end of a lesson, but it should be given sometime *during*

(5) Silent reading. the lesson. (5) The last in

importance, comes the method of silent reading. Boys should be required by the teacher to read passages to themselves and then to give an oral account of the extracts read in their own words. This method enables a scholar to master a thing for his own information. It exercises his observation, memory, imagination and lastly, his intelligence. The scholar may also be allowed to read aloud, after preparation, in such a way that the meaning of the author can be followed by the teacher and the class sitting with closed books. Silent reading should be given in the upper classes, say, at least *once* a week, the quantity of the matter to be read depending on the average capacity of the class.

While urging the importance of silent reading it is not our intention to condemn the methods of reading aloud and recitation. On the other

Value of recitation and reading aloud. hand a good deal of stress should be laid on reading aloud and recitation. They

lead up to æsthetic discipline. They quicken the scholar's sense of the music of speech, his feeling for melodious rhythm and his appreciation of the harmony which results from the agreement between experience, thought or emotion and its fitting expression. With this warning that the standard of excellence in recitation is not simply to produce a picture that is word-

perfect, but that the reciter should also enter into the spirit of the piece, the practice of reading aloud and recitation is strongly recommended. The teacher must himself be so able to recite to his scholars as to show how to bring out the spirit of the piece recited by his manner, method and appreciation. Both poetry-pieces and good literary prose should be selected for recitation.

We have discussed in detail some of the important methods of conducting a reading lesson.

In concluding this paper a few practical hints for

Conclusion. the teacher will come in very Practical hints for the teacher. useful. (1) To secure proper

articulation and distinct

enunciation in the scholar, the teacher can not do better than taking resort to mouth-exercises, constant repetition of difficult words, and never neglecting indistinct articulation—whether in conversation or in a lesson. (2) To secure standard pronunciation, the imitation of a good speaker having no mannerisms, no dialectic deviations, no affectations should be insisted on. This will ensure refinement in speech for those who are lacking in it. The teacher, therefore, should be a model speaker. (3) The student should know and feel what he is reading. This will ensure clear expression and correct representation of the feelings embodied in a passage. (4) Let the scholar have varied study. Monotony fails to arouse interest in children. The matter for reading should, therefore, be selected with good care. Reading should be correlated with History and Geography. The tedious formalities of Grammar should be avoided. This will go a great way towards making the lesson interesting. (5) Proper regard should be always paid to stops, pauses and accentuation. (6) Naturalness of voice and manner should never be sacrificed.

If these instructions are carefully observed, it is hoped that reading will become a source of pleasure and enjoyment to the scholar. It will create in him a taste for literature which will stand him in good stead in years to come when the influence and initiative of the teacher have been withdrawn.

PANCHANAN BHATTACHARYA,

GURUKULA—AN INDIGENOUS EDUCATIONAL SYSTEM.

(By CHAMUPATI, B.A.)

INDIA is a land of originalities. In ancient days it developed a type of civilization, strikingly original, and one entirely suited to the circumstances that helped to foster its unique activities. That civilization was all-sided; it conduced to a varied, yet consistent development of a living national organism. The manifold departments of national life—viz., industry and culture, politics and economy, religion and literature, received each its quota of normal organic growth. In industry strife was synonymous with life. There were present, in the economic organisation, forces that clashed and made for competitive progress. But religion was the regulating factor, and the care of spirit being supreme, all carnal antagonisms had but a superficial significance like ripples on a calm, stormless ocean.

This civilization, like all subsequent types that developed elsewhere, was based on a system of education, which in India, was indigenous, and which, though imitated in some of its phases in other countries, remains yet, in its entirety, the special inheritance of this specially-gifted land. The system, to which we refer, is the Gurukula System, revived in modern days on the hoary banks of the Ganges in Haridwar. We shall study this system in some of its remarkable peculiarities. For it may be, this ancient mode of imparting culture may suggest a few stray points for the solution of those intricate problems which vex intelligent heads to-day all the world over.

1. *Celibacy*.—India has never been for co-education of boys and girls. The lots of the two sexes, though cast in the same groove in after-life, are, in essence, different. Supplementary though they be, man and woman are not identical. Their physical make, their cerebral capacity, their psychic tendencies, their mental aptitude,

all point to the different role each has to fill in the subsequent drama of mature life. Each has a mission of his (or her) own; how can then their preparation be the same. More than the school-room, the play-ground is the proper place where the individual energies of scholars have their fullest display. It is the arena of their varied activity; the magnetic pole which will turn the needle to the magnetic north. How to make the girl manly and the boy effeminate is a problem which may well defy understanding. To substitute dolls for toys and toys for dolls is a more difficult process than making the sun revolve and the earth stationary. Co-education is an attempt to unsex both sexes.

The Gurukula requires not only that girls and boys be educated apart, but that they should live all their time apart, so that neither should have an opportunity of casting a glance at the other. To the Indian, life is not a romance but a reality. Not a minute is to be dreamed away in idle, imaginative pleasure. The days of boyhood are to be carefully husbanded, and used, each second, in the development of latent energies. Passion, if once allowed to take root in the boy's breast, finds a fertile soil, while the weeds it plants there take long ages to be rooted out. The juice of virility, the oil of life's engine, is not to be trifled with. The boy, if he barely thinks of a girl, hampers the growth of his manhood; he is no true *Brahmachari*. The same may also be said of a girl who has taken the *Brahmacharya* vow. In the case of a boy this vow extends over twenty-five years, while for a girl, it covers sixteen years, the lowest marriageable ages of the respective sexes according to Indian *Shastras*.

2. *Seclusion*.—The evening of life is *Sanyas*; its blissful dawn is *Brahmacharya*. Both have a similar glow in distant twilight hues. In India that glow is supplied by seclusion. Reformers, all the world over,—in fact all who came with a mission, were reared in forest recesses. Brooks were their books and stones and trees their

venerable teachers. Before expending their energies on the edification of mankind, they were long in converse with nature. With the inner *atma* which runs through every reed that blows, enlivening every blade that draws breath, they were in constant communion.

The Gurukula strikes its mansion in such silvan solitude. Away from men and cities, its pupils sit at the feet of mother nature, unsoiled, unsophisticated. The filthy influence of streets, with their unwholesome smoke and indecent slang, is entirely shut out. The Guru takes the place of a neglectful father, and the Guru's wife, an aged dame of sacred spirituality, fulfils the duties of an ignorant mother. The pure air, the pure water, the clean, unclouded atmosphere help spiritual growth no less than physical health. Undistracted by worldly cares, the young silvan scholar devotes his undivided energy to the prosecution of salubrious studies, and grows mentally and intellectually at a speed infinitely greater than his city competitor.

3. *Simplicity*.—For the earnest *Bramachari*, the levities of fashion have no attraction. Nor is he a slave to his palate. His aim is to adorn his interior, and to feed his inner *atma*. Like *Rishis* of old, he glitters without ornaments. Of intellectual viands he has enough and to spare, while his physical appetite may have its full satisfaction in delicious content. His body, like his soul, is perfectly clean, and the trappings which veil his intrinsic beauty, he discards as hateful. The stiffer the collar that encircles the neck, the greater the impediment it offers to the free movement of the body. He washes his own clothes or gets them washed by a washerman, but in neither case will he let them be ironed, for an ironed cloth is an iron fetter. His diet is nutritious but no spices have seasoned it, for spices are prohibited food to the *Brahmachari*. He may take abundance of *ghi* and abundance of milk, but not the slightest quantity of chilly and acid pickle. To lemonade and lime-juice he is a

stranger, for the saliva of his tongue and the digestive powers of his stomach grind down the hardest meal. He does not lead an unnecessarily austere life, though sometimes to accustom himself to hardships, or to help his suffering brethren in Africa, he may undergo a voluntary fast. Like the economist of to-day, he is in favour of attending properly to wants. But wants he understands as synonymous with necessities. Food which helps the growth of the body, and clothes which protect his limbs from biting cold and scorching heat, are naturally liked by him. But unprofitable appendages—luxuries which may conduce to comfort and fore shadow idleness are not only studiously avoided but instinctively hated. For luxury, he has learnt, saps the roots of *Brahmacharya*.

4. *Fraternity*.—Men are born in inequality. The disdain, they show, is inherited. The high hate the low, and the low can ill-bear the domineering looks of the high-born. At home, in school at play, in walk, the son of a rich parent, is accompanied faithfully by his silver spoon; while the poor-born finds even his wooden ladle often times desert him. The child begotten in a hut is trampled over to make a plank in the rich man's passage. His manhood defies his constant obligation to stoop. If he succumbs, he is dehumanized—a soulless creature, without an scope for hopeful ambition. Let his rebellious spirit burn, and he has no rest—he will be constantly jealous. Who can tell whether it strikes and struggles going on in Europe, while make wealth a bed, bristling with thorns, and labour a force which constantly rebels, owe to their origin to that young flame which flickers between light and dark in the studious hours of school.

In the Gurukula, inherited differences are entirely levelled up. The prince and the peasant stand on the same platform. All dine in the same dishes, all play in the same fields. All say their prayers on the very same *asans*, all

at the *Guru's* feet under the same shady tree. Their uniform is of the same material, and they mend one another's clothes with the same needles. The prince, perhaps, has more holes in his shattered garment where his proud poverty constantly peeps out. He has sat many a weary night by the sick-bed of his chum, the page's son. Ancestral pride has given way to fraternal service so that many a Krishna has played his benevolent part to many a Sudama, to his own enrichment more than to the gratification of his humble suppliant. Think evil of none. Harbour no malice. Be inimical to no living creature. Reared in the lap of such spiritual precepts, the *Brahmachari*, as he steps forth into the world, regards this wider family as only an extension of the same *Kula* of his *Guru*, with the inmates of which he is still related in spiritual bonds.

These, reader, are some of the glaring features of Gurukula life. Judge them for thyself and see if they have lessons for thee to learn, meditate on, and assimilate. Two more points which we shall presently notice, as features of modern Gurukulas, relate more to India's duty in patriotism, and special educational facility in this country, than to any inherent superiority in the system inaugurated by the *Rishis*.

5. *The medium of instruction is Arya Bhasha.*—One of these is the substitution for English, employed as the medium of instruction in University and school education, of Arya Bhasha, the most wide-spread of Indian vernaculars, a language of Indian origin, and one which bids fair at no distant date to enjoy all those prerogatives which should naturally belong to the spoken tongue of a living nation. The experiment has so far succeeded in the Gurukulas that even in the highest college classes no difficulty is experienced in imparting instruction of the highest type and standard in this native tongue. The standard of efficiency achieved has risen instead of going down. Modern sciences

are a topic of common talk among boys. Literature is no more a covetable treasure locked up in foreign unintelligible wordings. Philosophy and religion are spontaneous suggestions of the mind. History and Mathematics have ceased to present their adamant barriers. The *Brahmacharis* dive into the spirit of science, and on countless things offer original ingenious hypotheses. Boys, even of the lower form, can be kept in contact with the moving, matter-of-fact world. Not only is the habit of independent thinking cultivated easily, but even in giving it a proper and effective expression they have a tongue, ever ready to pour forth volumes of ohiselled wording.

6. *Revival of Sanskrit.*—Foreign scholars are, with inimitable patience, digging Sanskrit treasures. Their rude spade sometimes disfigures the gems it strikes, but to them small blame is due, as we to whom the resuscitation of Sanskrit is a sacred duty, religious as well as patriotic, attend not to its revival. In this the Gurukula has taken the lead. Sanskrit has, in its scheme of studies, the very first place. Studied with ancient and modern methods combined, it has become a living tongue of these days, which speaks as fluently as any language sucked from the mother's breast. If cultivated properly, this celestial language enriches thought, gives reflection a bliss and speech a pleasant melody; it widens the mental outlook and forgets the bond, which links the modern reader with first-born *Rishis*.

We have thus enumerated a few of the numberless good points of the Gurukula, a perusal of which may benefit those interested in the study of India's glorious past. The *Rishis* of old indulged in no idle dreams. Before them were no visionary pictures, but ideals, in stern reality realised, as we find even to-day those phantoms of the past come to life again. The success we gain in these degenerate days is proof enough of the wonderful achievements of our ancestors from the above system of education, a simple description of which in ancient Indian literature sounds like romance to incredulous ears to-day.

"NATURE STUDY AND ELEMENTARY SCIENCE IN THE JUNIOR CLASSES."*

NATURE Study is "the habit of observing and thinking for one's self and at one's best with books or helps in presence of the facts and in the open air." It is also defined "as a process by which simple natural objects and events acquire meaning." Time was when books were freely used and the knowledge contained between their covers, was the sole thing sought after—a legacy left to us by the monastic education. It was Froebel who broke through shackles of the prevailing custom and it was he who recognised the child as an inquisitive animal endowed with reason, refusing to be satisfied with anything given on trust and belching it out as soon as the tedious process of getting down the information was gone through. The result of that system was that, as Dr. Bourne once put it, "the boys got stupid for getting into school." The importance of learning things by observing them and of studying the natural phenomena in so far as they affect human interest was at once recognised and a change for the better came over the method of teaching and this marks an epoch in the history of education.

Not long ago the most unfounded imputation was made against the Indian student, that he was not what he ought to be, would not stand comparison with a Western boy in the matter of possessing an acute observation and a sense of nice discriminating judgment. Let us not take stock of the present condition to see whether there is any truth in this irresponsible statement or not, but let me say that this is the study which infants as soon as they are put into school should undertake so that they may come to possess that power which alone is identical with knowledge so that as Herbert Spencer put it, they may use the know-

* A paper read at the Annual Meeting of the Tanjore District Teachers' Guild held at Tiruvalur, by Mr. N. Panchapagesan, B.A. L.T., 1st Asst., The High School, Tirukattupalli.

ledge gained when they take their places in the race. This study is essentially hand and eye training, the observation of living creatures and plants in their natural habitat and the arrangement of facts learnt in their logical sequence and in relation to one another. Here it is the child learns to picture to itself the grandeur of Nature in all its glory and variegated colours and to perceive the unerring hand at work harmonising the apparently varying things seen all round; here it is that the child learns the inviolable laws of nature through which "God fulfils himself in many ways" and here again it is that children have the best scope to exercise their imagination to body forth the forms of things and to discriminate the real from the unreal. Nature Study creates wholesome fear of God in the mind of the boy and he is given an opportunity to learn and practise what is most useful to him in his after-life.

A line of demarcation is drawn here between Nature Study and the Study of Sciences. The infant refuses to believe and cannot at this stage learn the matter of fact rule that several colours are differently refracted when they pass through a prism, to form a rainbow, but the vague idealism inherent in the child's nature, reads meanings into the facts of nature that science does not endorse. The child does not invoke the help of proud philosophy to teach him what rainbow is but finds immense pleasure in imagining gems and gold hidden in the radiant bow. Surely there is no harm in allowing the child to indulge in such imagination but it should be utilized for a proper and useful purpose to prevent the child from becoming a day-dreamer.

What passes now for elementary science or elements of sciences is taught within the four walls of the class-room. Very often some truths are flung over the heads of boys and a sincere attempt is made to verify the truth by means of experiments. The student is placed in the position of a sight-seer in a puppet show or a drama and the moment he leaves the class-room the truth

through his brain, no lasting impression having been made. In the course that is now adopted no human interest is found in the lesson. The tale of a thermometer, the calibration, the filling and the graduation whatever testimony it may bear to the skill of the English workman, has a tragic end unless the student learns how it is useful to him in his life. Let me not multiply instances but let me lay down that Nature Study is aggressively practical, teaching the student how he should use his head and his hand.

The scarcity of text-books to teach Nature Study is a point in its favour, while you will be perplexed with a large array of *Science* books in the school library to teach elementary science. The students of Nature Study do not feel the necessity to have books because they find "tongues in trees, books in the babbling brooks, sermons in stones, and good in every thing."

No two people are alike and two men of the same trade do not often agree. If this were not so, the whole world would be a comedy of errors. This only marks the individuality and if this is true of men and things, with equal force it is true also of the method that should be adopted to train the mind. It has been realised that it is not only unnecessary but positively injurious to cast all in one mould—to attempt to train all in one way and the students are far more likely to derive full benefit from their studies when the subject matter is chosen with reference to their surroundings and aptitudes and as far as possible with regard to their intended work in life. Surely Nature Study imparted in the place from which I come, must differ from the same adopted in urban areas. Those of you who have gone to the Grand Annaicut will at once realise that Nature and Art there blend together to make the place eminently fit for the location of a first class Nature Study School but in towns there will be a pile of pompous buildings the monument of art and the monotony is only relieved by an adventitious plant on the wall with a determina-

tion to destroy the Art and to establish the superiority of Nature over Art. An attempt may be made in rural areas to teach agriculture by scientific method, but in urban areas, the same thing must be done only with pictures or plants cultivated in pots. There must be variation also suited to the needs of the pupils in schools. The method of teaching and the subject taught must therefore vary with the place and with the individuals.

Nature Study is not at all a separate subject intended to add one more to the already overcrowded school curriculum. It is a method, the scientific method, the heuristic method to teach a subject. A change has come over the teaching of all subjects and this is only consistent with the progress of humanity. Any thing that may be learnt in school must be learnt by the student himself, he being placed in the position of a discoverer. The process is a slow one and learning does not connote storing information. What little may be learnt must be learnt well.

The teaching of science by this method must be begun very early to avoid the deadening effect of lesson-learning which comes hour after hour checking the material progress. The teaching should be undertaken not with a specialist's point of view and at any rate it is not to make the student a physicist or biologist and the precision which marks the scientific study may be sacrificed to keep the curiosity alive. The aim must be kept in view and the children must do experiments themselves, must learn action, and must learn to appreciate nature to develop their æsthetic side. "Every thing has a moral if only you can find it." This far reaching conclusion of the Duchess must live always in the child's mind.

In Nature Study, the moral, the æsthetic and the practical aspect are quite as much essential as the scientific aspect. What then are the means to secure this end? As said above the means can never have the monotony of uniformity. The teacher should be on the alert to find the ways and means to impart knowledge by scientific

methods. Of the several means adopted, some are—school gardens, Nature diaries and seasonal studies, weather records and records of changes and school excursions. All these roads are only the highways through which the students may pass to be in the home of knowledge with the conscious possession of it and to use it when occasion demands, but there are many by-paths only too numerous to be mentioned. Let me take these highways in order.

Every school must have as its necessary adjunct a school garden. A school that does not possess space for a garden must be refused recognition. In rural areas there is enough of space around the school owned by the private landlord, and the Government should be moved to put the Land Acquisition Act in operation to bring the ambitious private land-owner to terms. In towns the municipalities should be persuaded to convert every nook of unoccupied land into a pleasant school-garden to add beauty to the town and to make elementary education efficient and successful. These school-gardens form a prominent feature in other countries. In France there are 28000 school-gardens, in England these gardens are growing in numbers and in Canada these plots of school-garden are earthenware black-boards which the teacher uses with great advantage.

The bulk of the pupils in rural elementary schools hail from the agricultural class and the question of introducing scientific agriculture in India will find a solution only if these school-gardens are run on right lines. India can expect salvation in teaching the boys the advantages of pliant loose soil, the single seedling and the artificial and scientific manure. These school-gardens may be made to serve the purpose of model farms for the conservative father to copy and for teaching the son the rationale of agriculture. The amelioration of a condition of affairs which it is impossible to regard as irremediable is not from an imposition of protective duties, but

from the establishment of school-gardens where the pupils should learn for themselves how they could grow two sheaves where one was growing. The school building may be a simple unostentatious one in conformity with our plain living tendency but to cultivate high thinking the school should possess a garden and some tools made locally.

In these school-gardens, the infants grow seeds. These seeds sprout by the profuse watering done by the boys themselves. The boys are required to maintain a diary to detail all information as they are watching the growth of the plant. Even before alphabets are learnt the children maintain their diary in the form of pictures. All the salient features in these diaries are copied in a book by the class teacher with the help of the boys. These boys prepare their text-books and these text-books grow in size as their plants do. These plants will never cause intellectual nausea as the printed matter in a book does. In case a plant should die, the teacher finds out the cause and sets his pupils thinking, varying the conditions in another plant to bring about a similar result. Experimenting is done and inference drawn. How the season affects the several plants and how weather variation alters the growth of the plant, all these are learnt by the boys and noted in a book. The names of all annuals are learnt by experience and noted in their seasonal studies. The conditions that favour the growth of the plants are connected with the readings of the thermometer, barometer and hygrometer, etc., kept in the garden, the use of which the boys easily learn. Thus a beginning is made for a scientific study by the scientific method in the school gardens and juvenile research is undertaken before the pupils are able to spell a word. The research work which is now done by post-graduates will reach perfection if research is begun as indicated above and continued in the same spirit to the University course.

The connection between the man-made meters and the God-made plants is brought home to the pupils' mind by their own experiment, observation and inference. The readings of these meters must be taken by the boys and recorded in a tabular form. The only instrument that is put into their hands is the foot-rule and in order to induce habits of regular systematic observation all sorts of measurements should be kept going and discussed. The height of each boy and the length of any part of his body must be measured and the idea of symmetry given. Now or never can æsthetic taste be developed and the time devoted for measurements of quantities is not ill-spent. The children are fond of drawing and this taste will keep the child through the troublesome work of pictorial representation without suffering mental ennui.

The importance of school excursions cannot be overrated. The excursions should not degenerate into mere pleasure trips but must be undertaken only for the excellent educative value they afford. In these excursions the fauna and flora of the district are seen by the students. After several excursions the preparation of the district map by the boys themselves may be undertaken. The invisible influence of the teacher who is to accompany the students in excursions is perceived in all the jottings the student carries back to the school. The student does not view the teacher any more as a superhuman being having a small head stuffed with all sorts of information about things and a brawny arm with potentialities for caning but looks up on the teacher as a help-mate who will aid him in learning. I see in these excursions the moral significance of the Boy scout movement. The students learn self-reliance and obedience to constituted authority. If the managers cannot be made to pay the cost of the excursions for the manifold advantages they possess the boys may be taxed and the excursion undertaken. If sufficient money is not forthcoming by taxation, the principle of strict economy

might be practised by making the senior boys in a class the cooks and by accepting the subscription in kind from those who cannot find hard cash. If all these fail the boys and teachers must beg from door to door to find money.

There must be at least four excursions in a year and the same place must be visited in two different seasons with a view to make the boys learn how the trees present different appearances in different seasons. A programme must be previously thought out and it must be religiously adhered to. The excursions should not take the boys for a number of days together away from their parents. Subject to this limitation of time and of funds at the disposal, places of historical and industrial importance must be visited. Forests and extensive cultivated lands bearing all sorts of produce, mountains or hillock tops and the view they afford to study the things below fill the child's mind with grandeur of Nature and impress its mind with the sublimity of God. Small excursions to the river side and to the paddy fields lying within easy reach from the school have also benefits that ought not to be forgotten.

I have been talking of the means adopted to train the eye and the hand of the student. Besides those mentioned above, I do like that every school should have its own work-shop though small it may be. The full-mouthed laboratory is only a classical name for work-shop. The latter name is preferred for two reasons—it conveys the dignity of labour and secondly laboratory connotes the teaching of some experimental science, the term having been borrowed from the University or College. All the apparatus and appliances I like to have in the work-shop are some measuring and weighing appliances and some tools for manual working. In the work-shop with the few apparatus that will not cost more than Rs. 100, the students must learn the realities of life, they must measure and weigh, cut and carve and turn themselves into mechanics

without knowing it. Then and only then will there be life interest in the knowledge they gain at school. In the first year of the school life the foot-rule is to be used and in the second year the balance is introduced. The student begins to weigh the things around him and thenceforward he gets into the habit of weighing with care before he begins to believe. The rule is a stick and the balance appears to be a living thing. Its action promotes action. To weigh, the child must get up and move about and in weighing the child is introduced to the elementary rules of the operations in Arithmetic. Have we not seen the child making a balance with the peel of lime fruits and cocoanut ribs and shall we not then use this knowledge to introduce weighing as early as we can? In girls' schools the necessity of introducing the balance is still more keenly felt so that these girls when they grow into womanhood, may carry the balance into the kitchen and weigh the ingredients that enter into any preparation. If we are ever to stop the waste that is observed in some houses resulting in the production of an eatable that is too acrid or too sweet we must make the girls learn weighing and use the knowledge thus gained. The habit of thrift is easily taught. Our girls had the inborn tendency to use their nice sense preception to weigh anything correct to a gram and the new civilization has driven these old and useful occupations from the Indian homes. The tendency is dying and we must suit ourselves to the changing times and the balance must be introduced without delay.

Tools must be used in the work-shop. Of all the definitions I have read of man the one that I like best is "Man is a tool-using animal.... Feeblest of bipeds; three quintals are a crushing weight for him. Nevertheless he can use tools, he can devise tools, with these the granite mountain melts into light dust before him. He treads glowing iron as if it were soft paste; seas are his smooth highways, wind and fire are his unwearying steeds.

Nowhere do we find him without tools; without tools he is nothing, with tools he is all." Only now some manual training has been made a part of teachers' course in the Teachers' College, Saidapet. When these new teachers find employment in large numbers in our schools, tools will be largely used, and literary studies done at desk will give place to practical studies learnt at workshop, so that hand and eye may be trained along with mind. The dignity of labour is understood and our boys who have not come up to expectation of the examiners have trained hands and eyes with the wide world before them.

The present day curriculum bristles with three R's. All the temples of learning (primary and secondary schools) make it compulsory that the worshipper of books should sit with books before him for a period of four hours if not five imbibing knowledge from all the lines contained therein. One solitary hour is devoted to master the mysterious number and infinite space. The lesson in the first hour bears no connection whatever to the lesson in the second and each lesson is considered with religious severity as something quite different from, and unconnected with its successor or predecessor. This system is useful to produce men fit to be considered literate only in blue books. The remedy for this regrettable state of affairs lies in our hands and it is quite possible to correlate all subjects of study with the study of objects done in and out of the school. The notes prepared by the students in the garden are only exercises in literary composition and the number of leaves seen in the plant as observed by the student and noted in his book will interest him more than a dry sum dictated. It is quite possible to evolve out of the school-garden, a variety of exercises and to completely work out a pre-conceived scheme in which the fourth R (reasoning) coalesces with the domineering three R's so as to form a homogeneous whole.

I have to mention some "Dont's." In the hands of an enthusiast it is not unlikely that

Nature Study dwindles down to the study of plant-life—the veritable Botany in another garb. The study of Botany whatever may be its use in arranging all the apparently different plants in a natural order of species and genera, cannot create interest in the child's mind and is as bad as any experimental science to make the child take life interest in all the things around him. Primary observation more than pictures and photos enables the child to learn for itself how and where the plants grow and what their uses are; there it stops and no attempt is made at classification. If the present day Nature Study be driven to its logical conclusion it becomes only a phase of scientific work giving rise to a school of ultra scientific faddists who undoubtedly are a menace to true nature teaching.

Shall we not then try to harness nature and divert its yet unused powers and possibilities to make it serve the future generation of India so that our boys may learn how to live? What did Marie Corelli put into the mouth of Santoris in her 'Everlasting' book? "I began at Oxford by playing the slave part—a slave to conventions and fossil methods of instruction. One can really learn more from studying the actual formation of rocks than from these worthy Dons whom nothing will move out of their customary ruts of routine. When I left Oxford, I left what I conceived to be slavery that is a submissively ordered routine of learning in which there occurred nothing new—nothing hopeful—nothing serviceable." Let us remember this and bring 'life' into school.

TEACHERS' ORGANIZATIONS.

IF ever there is any profession which is subjected to random remarks from all sorts of people, literate and illiterate, and which is considered to be easily accessible to any individual with a smattering of education it is the profession of teaching. That a large number of people unconnected with the profession should come forward to dictate the course of syllabus and suggest methods of teaching, that persons of other callings altogether unconnected with the sphere of education should take up big educational problems and pretend to solve them at a single breath, and that individuals, by reason of their official status, should exercise their unwelcome authority over educational matters, even a bit of which they cannot understand, which they, however, try to manage without knowing their own errors and a thousand and one difficulties that stand in the way of practical working,—all these are due to the fact that the profession has no strength of its own, and that the members thereof do not offer any solid resistance to attacks from outside, even though such attacks are thoroughly undeserved. It is ten thousand pities that members of one profession who are at least as well-educated as those of another, if not more, should keep quiet shutting themselves in their rooms, although their main gates are being knocked down and their sacred shrine forced into by irreligious and undutiful invaders. Whereas every other profession such as Law and Medicine maintains its integrity and dignity by showing to the world united efforts for self-development and self-support at various meetings and conferences, the profession of teaching alone stands without the solidarity of opinion and without any substantial effort at expressing a united voice on matters affecting its status, dignity and internal work. Even setting aside comparison, the profession is one distinct in itself comprising the whole of education.

It is well known to one and all of us that education is the first and foremost question that should engage the attention of the people before any other question is taken up for solution. Once the problem of education for a country is solved, then other questions are easily overcome; for, the latter are dependent upon the former. It is only when the people of a country are educated in the real sense of the word that they can realise their responsibilities in other fields. Education alone should be the bedrock upon which other reforms may be properly experimented.

But can this question be solved by any politician? Politicians, no doubt, work for the general advancement of the country including education. But are they all capable of successfully coping with the various intricate problems connected with education, with hundreds of questions that arise in the working of the machinery of education? My humble answer is 'No.' Politicians are sometimes dangerous. But for a few honourable exceptions, most of these politicians are persons exclusively of one particular profession, who have no touch at all with educational problems or the machinery of education, but who by accident of fortune or circumstances get into councils and public bodies and try to wield an authority over anything that comes under their notice. Sometimes, politicians working in a particular field and attaining success therein, pose themselves as general experts and venture to set their tender hands on matters to which they are only newly born and which require before being handled considerable experience in the shape of an actual worker in the field for many years. Such persons are more likely to bring harm to the country than any real good. For, they will be bringing into existence a state of things that is quite unwelcome and sometimes opposed to the true interests of the education of the people. Nor can one see any soundness in a work being

thrown upon other shoulders, a work which can best be solved by persons who are fit for it and who have qualified themselves by education and experience to solve with ease the many intricate problems connected with education in its widest sense.

How is it, then, that such a state of things has arisen? The answer must be sought only in the want of a solid organization among the members who are working in the field of education—among members belonging to the profession of teaching. They allowed things of their own to slip away from their hands by not having regularly constituted bodies, and now try to get them back by a show of strength derived from a few associations started here and there which breathe at long intervals, perhaps once in three or five years, and which do not maintain a vigorous life to settle momentous questions. Here one association, in a moment of impulse, rises, passes a few resolutions and sleeps a long sleep from which it takes years to wake up, perhaps exhausted by the voluminous work which it presumes to have turned out in a few minutes' discussion, or by the distribution of a few copies of resolutions among schools, colleges and other educational institutions; there, a big conference consisting of a few enthusiastic educationists sits in its annual sessions and hastily passes a number of resolutions simply for the sake of resolutions characterising a meeting and winds up its proceedings.

These are not the ways in which big affairs should be conducted. Love of work and earnestness alone should form the guiding forces in doing a work successfully and in an organized manner.

There is no salvation for the education of this presidency, nay for the whole of India, unless the members of the teaching profession and those working in the field of education have a net-work of associations affiliated to a central

organization. One or two associations started here and there at distant intervals and an annual conference which consists only of a few members not altogether representative, cannot make up for the great want which I am exposing. Nor can they be called representative bodies whose opinions should be respected on all matters relating to education. There must be a chain of organized associations. Every high school should possess its own Teachers' Association consisting of representatives from its feeder institutions. If there are two or more high schools in one and the same place, they should have a common *local organization*. These local organizations should be affiliated to the *District Association* of teachers. Each of these District Associations should be affiliated and subordinate to a *central organization* which should be located in the capital city of the Presidency.

It is under these circumstances alone that a system can work successfully and the opinions of public bodies will be fully representative, commanding the attention [of the authorities of the Government.

Having thus pointed out the need for teachers' organizations and their relationships to one another, I shall, in a subsequent issue of this journal, take up the question of their formation, functions, &c.

C. RANGANATHAN.

In Active Preparation.

COLLEGE ALGEBRA

A Text-book for the Intermediate and B.A. Classes

BY

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HANDICAP TO TEACHERS.

THE teacher's profession is universally acknowledged to be the noblest of all but the practical teacher knows how far he is able to realize the truth of this in the face of the manifold vitiating influences that are reigning in the educational field, especially in this country. Within a short time after he enters on this profession, allured by the stamp of nobility that it bears, he becomes aware of the thick array of grave disabilities he has to encounter and subdue before he can make this profession deserve all the respect it has received in all ages and in all climes.

If it is borne in mind that the true aim of all education is to strengthen the moral tissue of the younger generation and lay far deep in their minds the foundations of character, one need not wait long to see what an important part home-education, the best of all kinds of education, plays in the achievement of this aim. Lack of parental co-operation is the most serious handicap to a teacher in his arduous task of moulding the plastic minds to the requirements of a lofty character. The primary cause of this criminal neglect of duty on the part of parents to their children lies in their ignorance of the true aim of education which is in their eyes a respectable means of earning one's livelihood or a matrimonial strategy to mislead the credulous parents of virgins or a meaningless ordeal which children are destined to pass through till they can no longer bear its rigour. Illiteracy and simple ignorance of parents on educational methods and principles are in a way excusable and can be overcome with no great difficulty if the teacher offers personally an explanation of his sincere endeavours to such parents who are generally anything but obstinate.

But it is quite regrettable to find many educated parents who are so much absorbed in the toils of the money-making and power-seeking world that they scarcely view upon their children as anything more than their pet animals in-

tended to amuse them in their leisure hours and who are so much blinded to the interests of their young ones by the dazzle of wealth that they do not hesitate to sacrifice the few divine souls entrusted to their charge before the tempting altar of notorious Mammon. Any amount of care bestowed upon the education of boys cannot be too much and any the slightest means spared in that direction is a culpable dereliction of duty, a grave misuse of one's guardianship, a sin and a sacrilege. Only when every parent realizes this, there can be found a real solution to the momentous problem of real, wholesome, all-round education and not until then. If some of the ponderous responsibilities under whose weight the teacher population is groaning, be willingly shared by the parents, ah! what a sigh of relief there would burst out from every teacher which would sweep clean the educational world of all its besetting clouds. Even the few parents who are made masters of their time by paternal inheritance or the smile of fortune are too conservative to adapt themselves to new educational theories and methods and it need hardly be pointed out that it is incumbent on every parent to acquaint himself with some of the up-to-date methods and theories of education for otherwise children of indifferent parents are pearls thrown before swine. Surely education here is bound to make rapid strides if the work of teachers at school is supplemented by that of parents at home; for, after all, the time a boy spends at school is but a small fraction of what he spends at home. If the immense activity in children be properly led through suitable channels and every fine instinct in them be properly nurtured and developed towards an exalted ideal, what a potent factor will they afterwards become in the upheaval of our nation!

One of the positive disadvantages to which a boy, in a well-to-do family generally falls a victim is to study under private tutors many of whom happen to be quite ignorant of the needs of the child's brain and how best to supply those needs. The harmful effects of such a system of having one teacher at home and another at school, the latter undoing regularly what the former has

done are within the experience of every teacher; and this mode of pumping information is detrimental to the development of both mind and body as it narrows the one and stunts the other. Thus the efforts of the schoolmaster are completely counteracted.

Parents there are again who treat their children with excessive indulgence which they regret to find afterwards too difficult to retract; and boys are very clever to turn this weakness in their parents to their advantage and gradually make them tools in their hands in gaining whatever their immature minds may fancy. In the long run their unbridled imagination leads them through the path of vice and wickedness till at last they are launched in worst miseries. When the teacher suspects that a boy is treading the forbidden path with his unworthy comrades and rebukes him for doing so, the boy is sure to find a staunch advocate of his cause in his fond father or will have recourse to sordid means of wreaking his vengeance on the poor teacher who will be shocked to receive such an unexpected and undeserved reward for his well-intended act.

So, the sacred duty of developing the physical, intellectual and moral side of boys devolves equally on both the teacher and the parent and in order that either may discharge his share adequately the sympathetic co-operation of the other is absolutely necessary. Such harmonious relations between the two can be brought about if the school management creates frequent opportunities of their freely mixing with each other by soliciting their help on occasions like the Annual Prize Distribution, celebrations of the Durbar Day and Anniversary of the Debating Society. Teachers must take pains to keep themselves in close touch with the parents and they must exchange their views periodically on the progress of boys and devise such measures as may be deemed fit to accelerate it. Parents should keep strict watch on their boys' conduct and should not only strive to rectify anything that may be found unsatisfactory but immediately report to their teachers who can often suggest practical means of setting it right.

K. H. V. S. NARAYANAN

A REFORM IN EDUCATION.

IN this country, up till lately, matters educational did not very often commend themselves worthy of any serious notice by the public and it is indeed a happy sign of the times that at the present day the question of education of her children is engaging the serious attention of the Indian nation. Vigorous attempts are being made both in the press and in the platform demanding compulsory and mass education. However much Government may at one time of its administration plead lack of funds, it cannot afford to put off educational reform and expansion for long; because, the question of education is at once of interest to the people and to the Government over them. The stability of a Government is inseparably bound up with the loyalty of its subjects and a true perception of loyalty is surely an outcome of sound education. If we find an association of educated members torn with factions and dissensions it is the system of training they have had at school that has thrown them out of gear. It is, I think, a sad experience of many of us that a town with a good number of educated people suffers more from factions and dissensions than another with a minority of them. Lord Carmichael lays it down that the school-master is responsible for political crimes and assassinations in Bengal; be it aye or nay our youths in schools and colleges are only led not trained to be citizens of the Empire.

The modern State brought with it to its subjects certain privileges—freedom of thought, speech and action. The effect of this has been in the direction of dis-integration, that is, a spirit of individualism has been fostered without corresponding factors to counteract this dis-integrating force of liberty. It is therefore the clear duty of the State to create such a counter-acting force by devising a scheme of education to neutralise this dis-integrating force of liberty.

Let us examine the schools as they exist to-day and see for ourselves if such a force is at work and what part they play in moulding the life of the nation.

The number of subjects is out of all proportion to the age of the pupils: the syllabus is felt much too heavy: the examination scare is staring both the teacher and the taught in the face and the students are more often let than trained to think for themselves and investigate. The schools foster in the pupils a selfish desire to acquire knowledge through words and books. In this way even the weakest pupil by dint of hard work and perseverance is helped in his individual effort to acquire more and more knowledge, and thus conquer the really more talented and skilful not only in the school bench but also in the battle of life. Our schools believe that all education can be effected by the cheapest and most convenient methods of explanations, words and books. Selfishness, jealousy and a dearth of imaginative power are the baneful results of this system—just the very opposite of the qualities to make a great nation.

The great defect in the educational system is that a spirit of social service and communal help is not engendered in the minds of the pupils: nay, the schools tend to weaken the very social ties at home: It is in the common experience of most of us that children take an active interest in the occupations of the family—serving, helping, acquiescing. The child instinctively learns the value of co-operation with and service to the family. Based on this child-instinct our schools must arrange for a training in the social or communal side of man's nature. Education should not be carried on by isolated individual occupations but by joint work of a whole class. The pleasure that a child takes in creative work should be given full scope while every child should feel that his is only part and parcel of the whole. The education that we give should

be such as to make each one of our schools "an embryonic community life active with types of occupations that reflect the life of the larger society and permeated throughout with the spirit of art history and science", or as Fichte observed: "Institutions should be established in which knowledge and work is combined which essentially support themselves through the work of the pupils and make conscious that according to his ability he must help towards their maintenance: institutions in which every one must know that his share is a debt owing to the whole, in which every one must share its joys or sorrows with the rest according to the destiny of the whole."

The social and moral virtues may be developed by organising excursions, garden work, organised games, juvenile societies and a training in the workshop and the laboratory. How little the importance of these is realised is evident from the very subordinate place given to these and the indifference shown by the authorities and managers of schools.

Having, as aforesaid, observed, that education should lead to social service and communal help, let me consider herein, briefly, the means to bring about such an *esprit de corps* in the minds of school children. Nothing in the school curriculum can foster this spirit better than practical work.

The aim of all education must be not to produce so many walking Encyclopedias but to breed up "men of culture." Perhaps the fuller significance of a "cultured man" or a "complete man" or more familiar a "gentleman" is clear in the following extract from one of Huxley's addressees:—

"That man, I think, has a liberal education who has been so trained in his youth that his body is the ready servant of his will, and does with ease and pleasure all the work that as a machine it is capable of: whose intellect is a

clear cold logical engine with all its parts of equal strength and in smooth working order, ready like a steam engine to be turned to any kind of work and spin the gossamers as well as forge the anchors of the mind: whose mind is stored with a knowledge of the great and fundamental truths of nature and of the laws of her operations: one, who, is no stunted athletic, is full of life and fire but whose passions are trained to come to heel by a rigorous will, the servant of a tender conscience who has learnt to love all beauty whether of nature or art; to hate all villainess and to respect others as himself."

Any one even with a slight knowledge of the educational institutions of our country cannot but wonder how many such "complete" men go out of our schools. On the other hand, our schools with all their boasted reverence to Pestalozzi and Herbart, try to cram into young and immature minds the accumulated knowledge of the previous generations and the result is, instead of intellectual giants, we have only lamentable types of dwarfs—physically, mentally and morally. It is beyond question that the only way to true culture is through constructive work or vocational training in schools. Nothing gives so much force and impression like practical work. The strength of character and the moral determination of such a youth are such as to stand him in good stead in actual dealings with men. "The most permanent and valuable achievements of humanity spring far less from books and teaching than from practical work and independent constructive work." Practical work alone can mould our natures and develop our mental powers. The standard of judgment also is greatly raised. The kind of work in an elementary school may be very modest and humble at first but it should preach the latest Gospel and sow the seed of "Know thy work and do it."

Based on this principle the elementary school of the future will be devoting its time mainly

vocational training and only subsidiarily to the three R's. To fulfill its objects to its utmost scope it should be thoroughly overhauled and remodelled. The entire charge of elementary education should be in the hands of Government. Every elementary school should have attached to it an agricultural farm, a dairy, a garden, a laundry and workshops in carpentry and smithy. Boys should be divided into groups according to the occupation of the parent and engaged all the forenoon either in the fields or garden or workshop or manual work—the kind of work depending on the age of the pupils. The three R's and Drawing—by no means a subject to be treated of lightly—should be taken up in the afternoons, correlated purely with the work turned out in the field, garden or workshop. At the beginning of the fourth year conversation and easy lessons in English may begin. The end of the fourth year would enable masters to discriminate those skilled in the arts from those in the subjects. Accordingly, the former is sent to the Higher elementary school while the latter to the secondary school. In the Higher elementary school greater attention should be paid to the vernaculars while English should be attempted in so far as it would enable boys to acquire a working knowledge of it. It is of vital importance that this period should be characterised by a regular course of training in civics. At the end of the school course every boy should realise that he has his own share of work allotted to him in moulding the life of the nation.

History and Geography should also be included but only in so far as would be sufficient "to place before the pupils the commerce, the exchange, the industrial and the political development of the nation in the present century." The rigid and the stereo-typed systems of examination looking for and bringing out only one side of education should be done away with all through the elementary school course. Seven years of such a training would enable a boy to

become master of one art while the general knowledge acquired at school aids him in understanding the machinery of Government and his own civic duties. The poor peasant or artisan will no longer feel it waste to send his boy to school as he knows and appreciates the value of work done at school: Thus the school work supplements that at home and *vice versa*. The boy no longer feels the school a strange and dreary place where he is to forget the outer world and confine himself to books, black-board and the teacher. We will then no longer be turning out boys who on leaving school despair and struggle in life but real men who are ready to take up their own burden and look the whole world in the face satisfying as far as they may the ideal of true citizens.

S. GOPALA AIYER.

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BY

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EDUCATIONAL IDEALS.

I

EDUCATION for education's sake is an ideal. Where, on earth, this ideal has been realized I cannot exactly say; but I can point to a spot where it has not been realized. We are all familiar with the ideal, eager to realize it, but like a mirage, it goes farther away, the more we advance. It is well for educationists to emphasize the supreme importance of the ideal and to strive to attain it. They may even fancy they are near reaching the ideal, for, do not the statistics show an increasing percentage of the educated? There is now in fact a craze for education and so far as it goes, it is a very healthy sign. But this healthy sign springs from a diseased state, for it is not education that attracts people; it is something else which is very different from education. It is, if such a fact needs to be stated, Government employment. The poor parents beg or borrow money and educate their sons. It is not, however, their solicitude for their sons' souls, not to feed them, that they don the mendicant's robe or brave the money-lender's fangs, it is to secure them places of power, high salaried posts in the Government service that would bring them opulence and happiness. With them education is a kind of speculation, a commercial venture, only less risky than most commercial ventures, for here the stakes are as nothing in view of the prospective gains.

Our countrymen view education with the selfsame glasses with which they view our rupee. They seldom stop to think of the token; they seldom fail to exchange it for sixteen nickels. They never miss the exchange value of education; they ever miss its real value. Whether like the rupee, education always fetches more than its worth I cannot say. This much is certain that it is

its marketable value that overcrowds our classes.

Strangely enough, this partial understanding is a virtue, not far short of an ideal. Let us not meddle with the ignorance of the real value of education so long as such ignorance sends more and more boys to the schools. Let us by all means leave alone a misbelief, if it leads to enlightenment. Just look into the psychology of an unlettered father who sends his son to school. "I will educate my son, let adversity do what it will. If he passes his examinations, what will the Government do but give him some employment?" and he educates his son with a vengeance. It would be mad to try to illumine the father. Leave him to himself. In no other case is *laissez-faire* more welcome. Thanks to Government, there is not yet any chronic unemployment among the educated classes. Education for education's sake is an excellent ideal and may it ever remain an ideal, if its realization will only lead to the education of fewer ones.

But there are other educational aims and ideals that ought to be attained and can be attained without danger. One such aim arises out of an evil. The parents and guardians may well afford to be indifferent to the education of their sons or wards. Their responsibility may end with their sending them to school. If afterwards they watch with anxiety the examination results, it only shows their eagerness the sooner to achieve their end. But teachers cannot afford to be so indifferent or irresponsible. They have to give them education and not find them work in the public service. They have to make them fit for life and not place them in life. They have to teach them to enjoy their work, to be willing soldiers to fight the battle of life, to show them the way to find that which would stand them in good stead always and

everywhere and *not coach them to pass their examinations*. These last words sound the keynote of the evil to which I have referred. The extent of that evil can perhaps be best understood from a conversation culled from where teachers meet and vent their views.

"What the headmaster says is sheer whim," said one of them indignantly. "He speaks of cramming and crowding, but he does not see that my boys do far better than others at the Public Examinations; and how can a teacher be judged but by the results of these examinations?" and he paused for a reply. The reply did not come for long and when it came it was no reply. It was another bit of news.

"Look at the papers," said another wistfully, "set for the S. S. L. C this year. They all come under either of two heads—too difficult or too easy; I apprehend a paucity of passes and the blame would be thrown on us." Again there was a pause and again there came news, apocalyptic news.

"And do you know?" asked another critically, "that the inspection report contains startling remarks. They belie the University diplomas at every step. Our senior wranglers are passed over while mere passmen stand head and shoulders above them."

So the conversation went on by fits and starts, each one harping on his own theme, trailing along his cares with him quite unlike the first of English Prime Ministers who invariably "put off his cares when he put off his cloths."

Need it be said that it is not my aim here to indulge in a fiction or to speak much of other things than an evil which I take to be rather grave. Examinations are everywhere in the school world, ay, sometimes they are the only things there. Enabling students to pass their examinations takes much of the

teacher's time, and is often his aim. I do not know what other aims he has. I know he has this aim and it is not an uncharitable aim either. It becomes uncharitable however, when it is his sole aim or even, his chief, for to help students to pass their examinations is not always to educate them. In this case the teacher is to be scarcely distinguished from the father who cares not for anything, but examination-success and looks forward to nothing but the day when his son shall be in power and plenty. I am no examination-phobe or maniac but to see examinations passing for education is very sickening. The headmaster who complained of cramming and crowding is the sort of headmaster that our schools want. The Inspector who writes what he finds refusing to be guided by diplomas is the sort of Inspector that teachers want. The teacher who educates his pupils in the teeth of examinations and guardians, who would have no hand in making his boys receptacles of rubbish is the sort of teacher that our boys really want though they do not ask for such in so many words.

But there is one thing about examinations. They have brought to light a wonderful fact about the boys. The amount of information that these young examinees manage to keep in their heads is really astounding. Those who have the fortune or rather the misfortune to be examiners must bear testimony to the depth and range of ready-made material they have at their command. The development of this faculty to understand and assimilate is very desirable, nay, essential but much more essential is the development of that other faculty that would enable them to find work and joy in one, that would sustain them in peril and keep them steady in prosperity. It is for this that I plead; it is negligence of this that I call an evil. Preparing students for examinations has certainly its value but

it must not be allowed to intrude into the fundamental idea of education which is very different from it. I think I have said enough to show the nature of this fundamental idea. What we want most is to realise it, what we want least is to ignore it. Let that idea be given its due place and its due place is the first place, in our schools. Let examinations be given their due place which, I think, is the very last place. It lies with the examiners to take the first step. If at the public examinations, the papers set are designed to test how far the candidates are really educated and not the amount of information they can reproduce in a given time, that would, indeed, be a great step. It is for the big to show and for the small to follow. May this aim soon cease to be an ideal!

I have spoken, so far, about two things one of which, I said, would better remain an ideal and the other, would better cease to be an ideal. These are only two extremes and do not exhaust the list of educational ideals. We have others nearer and dearer to the interest of both boys and teachers. One of them and that, probably, the most important one, is character. Character is our vaguest watchword; yet our grandest aim. Its very simplicity is a puzzle; its necessity an invention. There is never a less simple or a more difficult word in our imperial tongue. It includes this world and other worlds than ours. It is physical and psychical, spiritual and intellectual. If I were to send an exhibit to an international show of epigrams, I would pitch upon the word 'character' and be sure of winning a medal. If I were to be the director of a company of platitudinarians, I would assert my superiority by 'character' and command respect by that one single effusion of genius. I do not, however mean to compose epigrams or to aim at platitudes.

No body is without character and 'characterless' seems to be, somehow, a contradiction. The thief caught in the very act of hieing away with the stolen goods, finding himself over-powered and unable to escape, even if he could ascend the heights of murder suddenly burst out, "Ye fools, why exult ye in such scornful glee? Breathes there the man who does not lie or thrive? What did Siva say when, to save Markandeyan, he killed Death himself, what did he say, what did he say? 'Perpetual sixteen!' and changed, he not his own sixteen years into an eternity?" He thus saved his honour and vindicated his profession. A characterless thief could never have extricated himself by such a profundity of resourcefulness. Indeed, to be wholly characterless is well nigh impossible. If any one is found to lack it entirely, it were better to send him to a menagerie than to keep him amidst us. So far our work is simplified; we have not to create character, we have simply to develop it. While boys are with us one of two things may happen to their character; it may either become colorless or it may become vitalized. In the first case the loss is so tremendous that nothing can compensate for it. In the second case the gain is so tremendous that nothing can excel it. It is our duty to prevent the first, though we might often fail to procure the second. And remember between these two which are as apart as the Poles, there exist innumerable possibilities. 'Perverted,' 'abnormal,' 'immovable,' 'over-emotional,' one or more of these or other epithets of the sort might impure the originally unsullied character. The teacher must be an adept at character-study and more than that an adept at character-building. It is dangerous to pass over anything, however slight, if it touches character. He has to watch with vigilance the incipient stages of perversion in a boy, so that in time he may be able to ward off such a disastrous tendency.

It is, perhaps, needless for me to dilate much on character. How many have preached on the supreme importance of it and how often have they found that they have preached in vain! On the platform the question is easily solved. I doubt if there is anything at all that does not find a solution on that charmed spot. The bison rolling in his favourite wallow fondly believes that he has secured for ever his freedom from the biting fleas. But the moment the bison gets out of the wallow fleas unfailingly come to him and bite him. So too, the moment we leave the platform, the solved problems become complex again. To grapple with character, to check its weedy growth, to nurse it into usefulness and harmony is not, after all, so easy as the platform would fain make us believe. He that has ever entered a class knows the complexity and variety of phenomena under which character manifests itself. It is most eluding, most perplexing, for character is the very pith of human nature. Hence the subject is naturally full of forbidding aspects and this accounts for the deficient tackling of it in schools. But there are some special aggravations which make it almost unapproachable. These are what may be called 'Home-influences,' 'Environments,' and 'Examinations.' Let us first understand the meaning of these aggravations.

'Home-influences' are never a negation. They are positively good or positively bad. If they are good, the teacher can count on a factor that will facilitate his work. He can send his boys to their homes for the vacation and feel sure that they would return the better for their stay there. If, on the other hand, they are bad, he can be as sure of seeing his work systematically undone. The untaught guardian is of course, supremely indifferent to everything except power and place. The school-boy is often an object of vague respect,

not to say worship, in his house and around. He can assert his will, his whims, his vagaries by the sheer force of his future greatness. If he has the seed of goodness in him, he will not have much of malign tendencies but there is the strong temptation to have them in an atmosphere where his word is not far short of a law, where every wish of his is so within his reach. Suppose he is bad, no better place could be found to impose his rule on, without being taunted by a Magna Carta or pestered by 'over-kings.' Is he short of money for his extravagances? Why, he has simply to issue a writ of *Book-money* and no father is likely to lack so much of worldly wisdom as to risk his all by braving the terrors and uncertainties of something like a royal prosecution. He is, indeed, "the monarch of all he surveys" in his pleasant countryside villa.

N. K. VENKATESWARA AIYER.

(To be continued.)

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OUR EDUCATIONAL SYSTEM: SOME REAL WEAKNESSES.*

WHILE we believe that our schools and colleges have improved greatly in recent years and are improving, while we are persuaded that they are given proper State aid and are kept in a good tone of efficiency by proper inspection and examination, we should be the last to deny that they are still defective to a degree. Our system of education, if system it can be called, is one that is highly wanting—one that does not extend its compass to the needs of the nation and leaves much to be desired. Let it be asked what is it that a good system of education ought to do and what has ours done. One finds rather easy to reckon what our system has done and finds that, after all, it has done very little. The best that can be said of it is that it produces every year a good number of "the discontented B. A. who has carried away from his college a scant modicum of learning and an entirely exaggerated estimate of his own capacities, and the great army of failed candidates, who beset all enemies to subordinate employment." These, as they swell in numbers every year, cause not a little anxiety even to the Indian Government. Talking of these and of the steadily growing educated class of the children of the soil on the one side and on the other "a close and jealously-guarded monopoly of political power and high administrative office," Lord Ripon, one of the greatest of Indian Viceroys has said:

"To my mind one of the most important, if it be also one of the most difficult, problems of the Indian Government in these days is how to afford such satisfaction to those aspirations and to those ambitions as may render the men who are animated by them the hearty advocates and the loyal supporters of the British Government."

* A paper read before the Teachers' Association, Rajah's High School, Ettayapuram, by Mr. H. Sundaram Iyer, the Secretary.

See the obvious futility of our system of education which is of very little use or help in the subsequent working life.

A system of education should satisfy two great claims—that of culture and that of utility. The education that obtains whether in the Elementary and Secondary schools or in the University should satisfy both these important claims. It should take in view a scientific knowledge of the nation's needs and the training should be vocational to a considerable extent. The subjects taught should bear closely upon the pupil's future vocation. Does our system of education do all this? Does it foster our children on the ideals of true liberty and fervent patriotism? Does it prepare them to their life? And does it endeavour to bring them up to be good civic citizens of the future? No—no, indeed.

Leaving aside the education in the University whose portals are open only to those who are not bound by limitations of time and money, we shall take up for consideration the education in the school—that is, the education of the adolescent, of the poor democracy. We must here remember the simple but eloquent words of Mr. John Bright that the nation in every country dwells in the cottage. And it is of the utmost importance that the adolescent education of the democracy must be properly attended to. Especially in adolescent education, that is, in Elementary and Secondary education, there must be much tool work. "The child is essentially a craftsman." He delights in things rather than in words or ideas. In our system of education, there is not that intimate union of the theoretical and practical and hardly any provision is made for a kind of preliminary vocational training. For instance, the use of a microscope or the handling of it, is quite unknown to our school boys and most of them have to learn the hard principles of the combination of lenses and the Law of Distances before they begin to use it.

This is as absurd as learning the laws and principles of the buoyancy of liquids in order to learn or practise swimming. Thus our children are mostly taught by what are called "force-pump methods." Facts are forced into their brains so that many of them fall victims to unnatural precocity. In the words of Huxley, "the vigour and freshness which have been stored up for the purposes of the hard struggle for existence in practical life, have been washed out of them by precocious mental debauchery, by book gluttony and lesson bibbing." This is exactly the case with a great many of our University men as well as our children in the Elementary and Secondary schools.

In advocating the cause of vocational training, and that in an early age, it is not our aim to ignore literary studies, nor is it our aim to detract the merits of literary training. Far from it, man, in whatever walk of life he may be, has to be now and then inspired by ideals richly and nobly expressed for which we must surely turn to literature. But the literature should be chosen. It should be that which presents ideals in a form suited to the life of the individual and it should do much to give the individual a noble exposition of his daily toil. The literature that is to be read by a labourer, for instance, should be that which can instil into his mind a true conception of the dignity of his labour. It is thus that education should tend to both culture and utility.

Further, our system has rendered English and Arithmetic to be the fetish of the school-work. This ought not to be. What are called "the knowledge subjects" must be given their due share of importance and they must not be taught in such a way that as at present, they are forgotten as soon as the pupils leave school. They must be so taught as to "weld them on to the pupils' own experience of life and make them realities influencing thought and conduct and as

to be of considerable help in practical life." Add to these the enormous waste of time and energy in the acquisition of a difficult and foreign tongue, which, unfortunately, remains the medium of instruction in all subjects.

With this short sketch of our defective system, we shall turn to look at the status and work of our educators. The educator must be accomplished, active, sincere and good. He must be aware of what, to borrow an economic phrase, may be called the future needs of the market. He needs to know not one subject only but the correlation of subjects, their professional and trade uses. He needs to know the trend of public affairs, the changes in direction of human activity. He must know the capacity and bent of the individual brain and must have an intimate personal acquaintance with and control over the boys he brings up. He must be in *loco parentis* to the pupils under his charge. But is he all this now? It has to be said "No." The reasons are not far to seek. Low salaries, the poorness of pecuniary prospects, the insecurity of position, the lack of social consideration are among the chief. These are some among the many things that repel a great many of our University men—our B.A.'s and M.A.'s—from taking up teaching as a profession. A stool in a Government or merchant's office is more attractive than a chair in a school-room. Seldom or never are the brightest intellects drawn to this profession. How could the teacher salaried low, often hampered by the handicap of poverty, and nearly beset with doubts and cares and apprehensions as to his position itself, be expected to discharge sincerely and satisfactorily the functions of the responsible and sacred office entrusted to him? It is no wonder then that the earnestness of the ancient Guru of this land stands now in broad contrast to the indifference of many a modern teacher who has to fight against the modern stress of circumstances from which the ancients were more or less free. These are jus

a few of the weaknesses of our educational system which are pressing for a speedy and satisfactory solution.

One word in conclusion. The weaknesses must be removed; and the sooner they are removed the better. First, the public must learn to esteem the status and work of the educator at their true value and must make the profession more attractive by affording better salaries and more satisfactory conditions of employment. The education of the young men of the soil must be largely in the hands of the people, especially in our country. A new educational effort must be made and it must undertake the work of recasting the system of education so as to give a desirable minimum of useful education for every future citizen and so as to bring a happy adjustment between the process of education and the life for which the education is intended to be a preparation. It should found education, as beautifully expressed by the humanitarian, Mrs. Besant, "in accordance with the ancient traditions and national habits, and in adaptation to modern necessities, to meet at every point the growing needs of an ever-increasing nation." It must see that the nation's arts and industries are developed and fed with a constant supply of workers adequately equipped in respect both of general intelligence and technical training. As put by Pandit Malavaiya at the Congress of 1899, the people and the Government, in unison with each other, should "take measures to give technical and industrial education to the people, so that they may be able to find out the means of producing those things which are required in India in their own midst and not send away crores upon crores to foreign lands in lieu of things that exist." Unless and until this is done, the chronic poverty of India cannot be removed and her political regeneration cannot be soon achieved.

THE STATUS OF A TRAINED F.A. OR INTERMEDIATE IN SCHOOLS.

IN this paper whenever I use the words "trained F.A.'s" I include trained Intermediates also in the connotation of the words and whenever I say "trained Matriculates" I include as well trained S.S.L.C. holders.

It is a pity that, as the rules stand at present, a trained F.A. has no higher status than a trained Matric. It is true that the former is given a higher starting by 10 or 15 Rs., but mere higher pay cannot give him more status or, at any rate, cannot give him as high a status as he would have, if he had a more definite place in the hierarchy of teachers.

The trained F.A. cannot teach forms higher than the third in complete secondary schools, nor can he be the headmaster of an incomplete secondary school without getting exemption from the Director. The trained Matric has got the same privileges. Hence it not unfrequently happens that secondary schools both complete and incomplete, having limited resources, pull on for a number of years without a single trained F.A. on their staff without in any way violating the rules. Moreover, even in schools in which trained F.A.'s are employed, the management, whenever they have to go in for economy, dispense with the services of F.A.'s and replace them by Matriculates. And at the present time, when the terrible European war is taxing the resources of our benign Government, and hence it cannot give as much grants to schools as it and we would wish, there is all the more need for such economy. Even missionary institutions which, generally speaking, used to care more for efficiency than for money, have felt the pinch of the war, as their subscribers in Europe, America, etc., cannot send much, and are induced to run their schools on with the minimum expenditure possible. Hence it is all the more necessary at

the present time that a trained F.A. should have a more definite status in secondary schools.

When a trained Matric is considered eligible for teaching the III Form, I submit that a trained F.A. is equally competent to handle forms IV and V, at least, in subjects in which he is strong. But it must be admitted that if the F.A. is considered fit to teach both forms IV and V, there will not be much demand for L.T.'s in high schools; and so my proposal would in trying to do justice to F.A.'s curtail the prospects of L.T.'s. Moreover, as special optional subjects are taught in the V form, the F.A. may not be able to do as much justice to them as a graduate who has more grounding in them. But no such objection can be raised to the F.A. teaching the IV form. It is true that in almost all high schools English History and a little bit of Algebra and Geometry are begun in form IV so as to serve as preparation for the harder study in forms V and VI; but the F.A. who has studied the histories of Greece and Rome in addition to those of England and India and the Intermediate who has taken history as an optional subject for his Intermediate course, should be able to do justice to give the boys a general outline of English History quite as well as a graduate. Similarly, an F.A. who has studied Algebra, Geometry and Trigonometry in his F.A. course and an Intermediate who has specialised in Mathematics in his Intermediate course, may be reasonably expected to handle mathematics in the IV form with success. It cannot be contended that boys, who in the III form were being capably taught by Matrics, do become so far advanced or that their studies become so far advanced in the IV form that an F.A. is not able to teach them. In my opinion, an F.A. can, if he takes the requisite pains to keep himself up to date, teach IV form with as much success as a graduate. In any case F.A.'s who have completed the major portion of the B.A. course and F.A.'s who though they have

not studied for the B.A., have put in more than 5 years' service as teachers, can very well be entrusted with the teaching of form IV in subjects in which they specialised in the Intermediate or for which they have got tastes and aptitudes and hence have acquired special knack in teaching. And I would further suggest that the rules should be so altered that only teachers of the minimum qualification of F.A. would be permitted to handle form III, so that a trained F.A. becomes a necessity for secondary schools both complete and incomplete. The suggestion that a Matric should not be allowed to teach the III form, may be felt to be a hardship by Matrics; but they have got enough field for their activities in IV class and forms I and II.

The next point that I would emphasise on is that trained F.A.'s should be allowed to be headmasters of incomplete secondary schools, without any affiliation being required in the case of those schools with a complete secondary school. Though one of our Honourable Members in the Madras Legislative Council tried to get the rules requiring only a graduate as headmaster relaxed, he did not meet with success. The promise which the Director has made of considering individual cases, cannot go for much without a general rule allowing F.A.'s to be headmasters of incomplete secondary schools. It requires long and persistent agitation to get such a rule passed by Government. I would here point out that the F.A. should be made the lowest qualification for the headmastership of such a school, discretion being given to the Director to grant special exemptions in favour of Matriculates of not less than 10 years' standing as teachers.

Now, I come to elementary schools. The salary given in elementary schools is too low to attract a trained F.A. But the headmastership of a 1st grade elementary school may be reserved for F.A.'s; and in order not to spoil the prospects of Matrics of experience, for also Matrics of at least 10 years' standing as teachers. I may add that in my opinion no special exemption is needed for such Matrics.

To sum up, I would propose (1) The minimum qualification for teaching forms III and IV in secondary schools should be trained F.A. (2) The minimum qualification for the headmastership of an incomplete secondary school should be trained F.A., subject to the proviso that trained Matrics of not less than 10 years' standing as teachers, may be specially exempted by the Director for such places. (3) Trained F.A. or trained Matric with not less than 10 years' service as

teacher in a recognised school, should be the minimum qualification for the headmastership of a 1st grade elementary school.

In my opinion the stipend given to an F.A. for undergoing training should be raised to at least Rs. 15 and as a necessary corollary the stipends for graduates and M.A.'s should be raised to Rs. 20 and 25 respectively.

S. NARASIMHAIAH.

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OPINIONS.

Copy of letter from the Inspector-General of Education in Mysore, No. 17885/1808, dated 2nd February 1917:—

With reference to your letter, dated 10th November 1916, sending for opinion a copy of the book "Subodharama Charitham," I have the honor to inform you that the book has been spoken of well by the Text-Book Committee in Mysore.

Mahamahopadhyaya R. CHANDRASEKHARA SASTRI, Principal, Sanskrit College, Mysore (18-11-16):—

.....The language is faultless and the style simple and I would therefore recommend the use of this book in all schools where Sanskrit is taught, especially in Girls' Schools where its influence will be best felt.....

MR. SATIS CHANDRA VIDYABHUSANA, Principal, Sanskrit College, Calcutta (4-12-16):—

.....The ease and facility with which you have handled the various difficult Sanskrit metres and mellifluous verses you have composed give the lie to the popular assertion that Sanskrit is a dead language, and make one think as if Sanskrit is your own spoken language. The language is chaste and simple.....

The Hon'ble Dewan Bahadur Justice C. V. KUMARASAMI SASTRI, Madras (15-3-17):—

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EDUCATIONAL REFORMS IN INDIA.

Mr. H. R. James writes in the *Times* (Educational Supplement):—

It is more than ever important that education in India should be wisely guided, and that any new impetus given should be in the right direction, not the wrong. This consideration intensifies the interest attaching to the recommendation of the Public Services Commission "for the creation of a number of professorial chairs," which is the subject of the Indian article in your issue of March 22.

Amid a great deal of uncertainty and perplexity, there are two or three propositions which may safely be laid down as conditions of any profitable new departure in India:—

(1) No attempted reform or improvement of education in India can have any real success unless it can somehow win first the approval and support of educated Indian opinion, at least to the extent of a solid body of support.

(2) Success is further only possible through the hearty co-operation of Government, and enlightened Indian opinion, just as a hundred years ago the Hindu College, or Maha-vidyalaya, achieved its great success through the initiative of enlightened Hindus, encouraged first by the sympathy and later by the energetic material support of Government.

(3) Improvement of higher education turns now more than ever on the improvement of secondary education.

It should, I think, be added:—

(4) It is not safe to ignore or lightly to set aside the views and experience of the men whose life-work has been, and is, Indian education.

Now I have before me, besides the *Times* article of March 22, two other documents, the significance of which needs to be weighed along with it. One is an article from the Delhi correspondent of the *Calcutta Statesman*, dated February 10 (weekly edition), on the report of the Committee appointed to consider the arrangements in Calcutta University for post-graduate teaching, to

which your article also refers. The main recommendation of this Committee is "that the affiliation of colleges in Calcutta for M.A. and M. Sc. work should cease, and that the organization of post-graduate instruction of all kinds be considered to be the duty of the University." The other document is a pamphlet from Bihar entitled "Higher Education and Popular Control. A study in perils suggested by recent criticism of the Patna University Bill." This pamphlet is occasioned by the striking unanimity displayed in Bihar, especially at an extraordinary session of the Provincial Conference held at Bankipore, on November 26, 1915, in advocating extended popular control of University education.

To sketch even in outline the leading features of the controversies which lie behind these three documents would go far beyond the possible limits of a letter. I address myself solely to one point, the irreconcilable divergence of ideals which they reveal. Popular control of higher education means in India the wider and wider diffusion of University education with very secondary regard to quality and educational value. In March, 1914, I wrote in the *Calcutta Review*:—"It is of importance to inquire whether the type of teaching being inaugurated in the new University classes, which have grown so rapidly in the last two years and which are likely still to grow, is "post-graduate" in the higher sense according to the Vice-Chancellor's criterion, or not. Unfortunately there is no guarantee whatever not merely that the method of the University classes is to be of higher type, but even that it is to be of different character from that of undergraduate classes in affiliated colleges previous to 1906. There is an elaborate organization of lectures and lectures, but there is nothing else. With some slight qualifications those statements hold true now. The reference to "the Vice-Chancellor's criterion" is to words used by Sir Asutosh Mookerjee in his Convocation Address in 1912 to the effect that "the teaching in Calcutta University was of the same type precisely as the undergraduate teaching." The post-graduate classes under Calcutta University are very numerous.

There were between a thousand and fifteen hundred such students in University classes when I left Calcutta last year, and it is not likely that the number since then has greatly diminished.

On the other hand, although the recommendation of the Public Services Commission is not worked out in practical detail—in fact, the Commission intentionally refrain from recording a "finding" as between three views of the relation of the new professorships "to the existing machinery of higher education"—it is plain that they take the higher view of the meaning of "post-graduate" study, and expect that post-graduate students should in India, as in Europe, be relatively few in number. At all events, it is quite clear that Dr. Fisher, Sir Valentine Chirol, and Lord Ronaldsbay hold this view strongly, since what they look to is "a body of professors freed from the bulk of college drudgery and expending their energies "on a few selected pupils."

I do not now attempt any discussion of these difficult matters, but I do think it expedient, even necessary, that if the subject is at all brought before the readers of *The Times Educational Supplement* there should at the same time be some indication of the complexity and delicacy of the questions involved.—*The Hindu*.

MADRAS LEGISLATIVE COUNCIL.

2nd April 1917.

RESOLUTION OF COMMITTEE TO FORMULATE A SCHEME FOR THE EXPANSION OF ELEMENTARY EDUCATION.

The Hon'ble Mr. A. S. KRISHNA RAO:—"I have the honour to move the following resolution:—

'IV. This Council recommends to His Excellency the Governor in Council to appoint a mixed committee of officials and non-officials to formulate a scheme for the expansion and improvement of elementary education during the next ten years.'

"I rise to move this resolution with the confidence and hope that I will be able to convince this Government of the desirability of accepting this resolution. It was on the 6th January 1912 that His Gracious Majesty the King-Emperor stated in

reply to the Address of the Calcutta University: 'It is my wish that there may be spread over the land a network of schools and colleges, from which will go forth loyal and manly and useful citizens, able to hold their own in industries and agriculture and all the vocations in life. And it is my wish, too, that the homes of my Indian subjects may be brightened and their labour sweetened by the spread of knowledge with all that follows in its train, a higher level of thought, of comfort and of health. It is through education that my wish will be fulfilled, and the cause of education in India will ever be very close to my heart.' Those notable words formed the beginning of the famous resolution of the Government of India dated 21st February 1913. Before I examine how far steps have been taken to carry out that intention, before I consider the changes that have to be made in giving effect to that intention as early as possible, it is but appropriate that I should take a brief survey of the attempts made from time to time. I said 'a brief survey,' because any detailed examination of the history of this question will necessarily take a long time and the time allotted to us is not ordinarily sufficient for the purpose.

"As regards primary education various steps have been taken from the time of the Despatch of the Court of Directors in 1854 and it has always been recognized as the sacred duty of the Government to have a wide diffusion of knowledge amongst the masses. It will be found that the Education Commission of 1882 examined that question; and then the obligation of the State was recognised for the expansion of primary education. Again the Educational Resolution of 1904 was promulgated in the time of Lord Curzon, who also pointed out, in unmistakable terms, that it would take a long time before the people of the country could approach the standard approached by other advanced countries. It is stated to be the avowed policy of both the Provincial and the Imperial Governments to do all that is in their power to further the education of the masses. Since 1910, vigorous measures were taken both on behalf of the people and of the Government. It was in 1910 the late Mr. Gokhale, whose death we all deplore, moved a resolution for free compulsory education. Again he made attempts in the year 1911 to introduce a Bill for that purpose. Various opinions were collected on that Bill and in the year 1912 it was rejected. In the year 1913, after considering the opinions received

ed, Government laid down their policy in the matter of expansion of elementary education. Though every one is agreed that the time will come and must come sooner or later for the introduction of free compulsory education—even the Hon'ble Mr. Stone admitted it the other day—still the difference is as to the ways and means, as to the time which is necessary for bringing about such a change. It would be remembered that so far as the principle is concerned, there has not been any difference of opinion between the spokesman of the people and the spokesman of the Government. There has been fortunately in this case a fair consensus of opinion. When this question was raised in the Imperial Council, we find that Sir Harcourt Butler, in reply to the Hon'ble Mr. Gokhale's motion for a wide diffusion of elementary education, spoke in these terms:—

'I say at once that I am really sorry to find myself in opposition to the Hon'ble Mr. Gokhale and those who support his motion. We are all really working for the same object. I should rejoice no less than they to see a condition of things in India in which elementary vernacular education could be free and compulsory. The Government of India are deeply concerned to bring about such a condition of things. We are convinced of the necessity of breaking down illiteracy in the country.

'Though our views may differ as to means, we are all united as to the end—the Government of India, the local Governments, the Departments of Public Instruction and enlightened public opinion are single-eyed as to the end in view. We are determined, resolutely determined, to combat ignorance throughout the length and breadth of this ancient land, up and down, and to and fro, and though the struggle may be long and arduous, I do believe, my Lord, with all my heart I do believe, we shall prevail.'

'When this matter came up again for consideration in the House of Commons at the time of the introduction of the Indian Budget, the Under Secretary of State gave expression to these views:—

'Universal and free education in India must come, as it has come in all other countries, but the time is not yet, and I am confident that the Government of India has a policy dictated for the present by the same hopes and aims as the hopes and aims of Mr.

Gokhale. We have no attitude of hostility towards the principles which inspire his Bill. We and he are working for the same end, the breaking down of illiteracy in India.' It is, therefore, clear that there is no difference of opinion between the Government and the people as to the policy to be pursued and the steps to be taken in breaking down illiteracy up and down the country and to and fro. We have only to find ways and means. The Government of India having considered the whole question, thought that the time has not yet come, when they should introduce compulsion. They stated that they would give trial to the system on a voluntary basis—they would give it a fair trial and see what the result would be. To use the words of the resolution, they stated as follows:—'The propositions that illiteracy must be broken down and that primary education has, in the present circumstances of India, a predominant claim upon the public funds, represent accepted policy no longer open to discussion. For financial and administrative reasons of decisive weight the Government of India have refused to recognise the principle of compulsory education; but they desire the widest possible expansion of primary education on a voluntary basis.' They later on say in the same resolution:—'It is the desire and hope of the Government of India to see in the not distant future some 91,000 primary public schools added to the 100,000 which already exist for boys and to double the 4½ millions of pupils who now receive instruction in them. For purposes of present calculation a sum of Rs. 375 per annum may be taken as a rough approximation of the probable average cost of maintenance of a primary board school'. After this resolution was published in January 1913, we find that the Hon'ble Sir Harold Stuart in introducing the Budget for 1913-14 gave expression to this policy of the Government. He said with the same warmth 'The goal we have set before ourselves is the extension of elementary education to the entire school-going population. The attainment of this ideal is, of course, beyond the resources of our Provincial settlement, and the Government of India have recognized that the bulk of the funds for the financing of the new forward movement must come from Imperial sources.' He then pointed out various other difficulties. It is therefore clear that the ideal of this Government, to use the words of Sir Harold Stuart, is to give education to the entire school-going population.

'That being our ideal it is necessary to examine about the desirability of framing a programme, a comprehensive programme, to cover the whole field of education. It is quite necessary that there should be a scheme drawn up, showing distinctly during what period the whole field of education should be covered and showing clearly what funds can be allotted for the purpose of elementary education and what proportion is to be maintained between expansion and improvement of education, before we can hope to reach that ideal. It is necessary that the question should be considered from these different standpoints and also from the standpoint of the provision to be made for the training of teachers. I would ask Your Excellency whether it would not be possible to take more vigorous steps so as to cover the field of education within a definite period of time. That resolution of the Government of India stated that the existing number of schools should be nearly doubled or increased by about 91,000 schools and also that the number of school-going population should be doubled. It has cautiously stated that it was the aim and desire of the Government to do so in the not distant future. I quite realise the difficulty of the Government in coming to a definite conclusion owing to the difficulty of finding funds for it. But still it is impossible to conceive of a scheme of education unless a minimum amount is prescribed for the carrying out of this reform and for the purpose of trying this experiment.

'I know that Your Excellency's Government framed a programme for three years—for 1913-14, 1914-15, and for 1915-16. I confess that when the programme was framed it was framed in a liberal spirit to give a further impetus to the cause of elementary education; and it would have been more commendable if it had been possible to find funds to carry out the programme. I shall now refer to the programme and point out how far we have been able to achieve our object.

'According to the programme for three years, it was arranged that buildings should be constructed for 2,500 existing and 1,250 new schools at a cost of Rs. 2,000 each; and it was also proposed that 4,500 new schools should be equipped at Rs. 100 per school and that school gardens should be established at a cost of one lakh of rupees. This Government proposed that within three years, 1913, 1914 and 1915, Rs. 80½ lakhs should be spent in constructing

buildings for 3,750 schools, equipping 4,500 schools and providing school gardens. How far has it been possible for the Government to carry out this programme? We find that for the construction of buildings in 1913-14 against a programme of 80½ lakhs, subsidies were granted to local bodies to the extent of Rs. 14.73 lakhs; in 1914-15 owing to various other conditions subsidies for the purpose amounted to only Rs. 4.24 lakhs; and in 1915-16 the amount came to only Rs. 3,500; school gardens were provided in 1913-14 by granting a subsidy to the extent of Rs. 23,500. As regards the number of elementary school buildings constructed by local bodies, I find that the number was 125 in 1913-14, 296 in 1914-15 and 296 in 1915-16. These bring up the total number of buildings to about 700 as against what the Government themselves contemplated, namely, 3,750. Again under that programme it was also proposed that 1,500 venture schools be converted annually into board schools and the pay of the present teachers should be improved. No doubt the staff is strengthened; and teachers of all grades of schools were given a capitation grant. But much could not be done in this direction also. What is more important is that it was then provided that 1,500 new board schools should be opened annually making a total of 4,500 and that this was to be in addition to 2,680 new board schools opened between 1911 and 1914. It was a comprehensive programme framed in a liberal spirit. When the Government proposed to open 4,500 schools in three years, how far have they succeeded? They opened only 198 schools in 1913-14, 341 in 1914-15 and 44 in 1915-16. It is clear from the figures that though the Government framed a comprehensive scheme—for expansion and improvement of education—they have not been able to carry it out in full, the reason assigned being want of funds.

'That is the reason why we are bound to take the matter into consideration. What I would ask is whether it does not necessarily show the desirability of our making more vigorous efforts, whether by getting additional funds from the Government of India or by effecting retrenchment, to show a steady and marked improvement. So far as the programme is concerned, I asked a question as to whether a scheme was prepared for ten years, but the reply given is no such scheme is prepared nor is it possible to do anything in that direction. My question No. 63 at the present meeting and the answer thereto by the Government is as follows:—

'63 Q.—Will the Government be pleased to state how many elementary schools: (a) for boys and (b) for girls, are expected to be opened in the Presidency during each of the next ten years?

63 A.—The number of new schools that can be opened in a year depends on the funds available; and in the absence of any definite information on the latter point, no forecast of the number of schools to be opened is possible.

"I quite appreciate the difficulty that the Government have in allotting funds for the purpose. But, still, Your Excellency is aware that the preparation of a comprehensive scheme even upon the materials available is quite essential, so that the work may be steady and continuous. In this connection it will also be remembered that various suggestions were made in this Council year after year at the time of the discussion of the Financial Statement for opening more schools. I need not refer to this discussion.

"At each discussion demand was made for the provision of more schools; but the Government having expressed some difficulty in finding additional funds the provision could not be increased to the extent to which Honourable Members desired. It is, therefore, necessary that, instead of our taking up these questions at the time of discussion of the Financial Statement and our being met with the reply that the budget has already been prepared and that no funds can be found, we should sit in committee and draw up a comprehensive programme for ten years. If a fairly comprehensive programme is to be drawn up at all, it must be for a fairly reasonable period. I do not think that I need detain the Council by pointing out that there is still a large field to be covered in the matter of elementary education. If we are to go on at the rate at which we are going on, either with regard to the number of schools to be opened or the number of boys to be educated, it will take several years before we can achieve our object. I wish to take the figures for 1911-12, because it is from that period that, after the declaration of His Majesty, increased provision has been made for elementary education:—

	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
Number of primary schools	24,044	25,223	26,018	26,917	28,166
Male scholars	829,331	889,363	952,035	999,685	1,057,136
Percentage	27.1	29.1	31.1	32.7	34.5

"I have taken the case of boys only, but you may take it that in the case of girls the figures are much less. Even confining our attention to the case of boys, we shall find that from the year 1911-12 to 1915-16 there has been an increase only from 27.1 per cent. to 34.5 per cent. which works out in these years to 7.4 per cent. If this is the rate at which the progress is to be made, it must take a very long time, namely, 49 years. I have not taken into consideration the fact of the population increasing; and even assuming that the population does not increase, it will take several years before the number of scholars can be doubled or all the school-going population can be at school. Therefore a large field is yet to be covered before we can arrive at that goal. There are still several villages which have to be provided with schools. If you look into the figures as to villages which have no schools, you will see what a large field there is still to be covered. If we are actively to reach the goal set before us by the Government of India and this Government, steps should be taken to make a comprehensive programme to be gone through in a reasonable period. It is for this purpose that I come forward with this proposal on the present occasion.

"The reason for my suggesting the appointment of a committee is this: It is found there are various views put forward regarding the proportion of expenditure to be incurred between expansion and improvement of education. When a suggestion was put forward for increasing the number of schools, there was a remark made by the Government that attention must be paid to improvement of education and that there was no use opening more schools, if it was not to give real education. When a scheme was put forward for the expansion of education, it is said that unless adequate provision is made for the training of teachers, nothing could be done. We must have expansion of education as well as improvement of education. There is no use of sending a boy to school, if he is to leave it the next day; and there must be a corresponding provision for the training of teachers also. As to how far these questions have to be adjusted and how much funds should be set apart, it is necessary for the representatives of the people and the Government to sit in Council and arrive at a result. I do not imagine that in a matter where there is no difference, as regards the ideals or the objects to be attained, there should be any sort of hesitation for a committee being appointed to see what funds are available out of the ordi-

nary resources of the Government, to see in what way retrenchment could be effected, to see in what manner a scheme can be prepared to open new schools and the present schools can be improved and also to secure the training of teachers. I know the financial difficulties that are likely to be urged; and it is for that purpose that I have suggested the appointment of a committee, because whatever committee is appointed, it will consider the amount of funds available. If any scheme has failed it is because it has been framed without a correct knowledge of the funds available. Even for ascertaining that, a discussion and consultation between the people and the Government will certainly be of use. It is for these reasons I find it necessary to place this resolution before this Council and I hope that there will be no difficulty in the Government accepting this resolution or at least the principle underlying it."

"The Hon'ble Mr. K. R. V. KRISHNA RAO:—"I rise to second the resolution. When the Revised Financial Statement for 1913-14 was presented, it was clearly stated that as large funds as possible would be found for the expansion of elementary education and that there would be recurring grants made on a very large scale and that it would not be very far distant when almost all the villages would be provided with schools. It was also stated that some maps were being prepared and that lists were also under preparation. In reply to the discussion in the Imperial Legislative Council on the 28th January 1913 it was stated by Sir Harcourt Butler as follows:—"I hope before very long in the course of next year or so to be able to publish definite proposals from Local Governments for a course of expansion in primary education over the next three years. A good deal of material has been collected but so far it is not in a form in which it can be recorded. The Government of India are anxious to carry the public with them." This was the statement made on behalf of the Viceroy's Government at the Imperial Legislative Council. My Lord, time after time it was brought before this Council and it was also pressed at the meeting of the Finance Committee that more money should be spent for the expansion of elementary education and a definite sum out of the amount, provided for primary edu-

cation, must be allotted for opening new schools. No doubt some money is being given as recurring grants for this purpose; but most of the money is being spent on opening higher classes in the already existing schools, or for the purpose of providing other facilities and equipment. We, therefore, place before this Council the desirability of providing means for giving education where there is no education as that is much better than to give more education to people who have already some education. My Lord, the impression is that more money is being spent upon inspection than instruction. We want a definite scheme prepared for more schools being opened so that within a reasonable time the goal set up by this Government as well as by the Government of India might be made possible to be reached. That is by having a school in every village as far as possible. We are alive to the difficulties of the present situation and the financial stringency with which this Government are faced; but, at the same time, we want to place for Your Excellency's consideration the desirability of taking the public into your confidence in drawing up a comprehensive programme for the next ten years with regard to the lines upon which elementary education must be made and can be made to advance more and its diffusion made more satisfactory.

"Again, My Lord, the duration of school-life, with all the facilities that are being given to higher standards being opened in the already existing primary schools is found diminishing. In the year 1915, it was 2.17 years as against 2.19 in 1914-1915 and 2.92 in 1913-14. The cause for this diminution of school-life among students attending primary schools is also a matter which has to be gone into fully and this can be done effectively by taking the public into confidence. I suggest not only that this Government should look to the efficiency of education imparted in the public schools, but also endeavour to open more schools year after year so that there can be a wider diffusion of education, and the goal that is set before the Government may be reached within a reasonable time. For this purpose I heartily second the proposal that has been made in this resolution of appointing a small committee of officials and non-officials to frame a comprehensive programme and also to formulate a scheme for the

expansion and improvement of elementary education within the next ten years. During the year 1917-18 a sum of Rs. 4 lakhs has been granted by the Government of India to this Government; and that was definitely for the purpose of improving the pay and prospects of teachers and also for making provision for having more teachers trained. But as regards the expansion of elementary education it was more or less said that it was the concern of the Provincial Government. We have to look to our own resources for the time being, from the statement made in the Imperial Legislative Council, and in order to do that effectively and also to give satisfaction to the public, by opening new schools, a sort of consultation with the public is necessary and the sort of committee that is recommended in this resolution will go a great way in solving the problem both in the interests of the people and of the Government. I hope that the Government will consider the desirability of appointing a small committee."

The Hon'ble Mr. J. H. STONE:—"Your Excellency, the Honourable Member in proposing this resolution referred to His Gracious Majesty the King-Emperor and the words that he uttered on education; and it will be in the memory of this Council that those words were spoken in 1912. The Honourable Member did not refer to the equally significant fact that since 1914 the Empire has been at war. The progress made in education since the war began has not been great. It may be described by Honourable Members, who expected rightly enough before the war that education would progress in an increased rate—the Honourable Members who had those expectations are entitled to call the progress made, disappointing; and the extent of the disappointment is made plain in the statement that was presented to the Council showing the triennial programme. It is only necessary to look at the details given on page 14 of the revised Financial Statement to see how the war has entirely, or almost entirely, disappointed our hopes as to progress in education."

"The Honourable Member appears to think that the formulation of another scheme in addition to the three years' scheme will remedy this state of things. I beg entirely to differ from him. I cannot see how the formulation of another scheme can have any

influence on the matter at all. He has not really told us wherein the previous scheme was defective. The previous scheme covers the whole ground of elementary education and contains an estimate of what it would be necessary to spend to provide the country with an efficient system of elementary education under all the possible heads that would inevitably occur in such an estimate. The only definite suggestion that he has made as regards the scheme is that it should lay down a proportion between expansion and improvement of education. This three years' scheme lays down the proportion between expansion and improvement. It puts down so much for buildings. I suppose buildings must be taken as coming under both expansion and improvement. New schools want buildings; old schools also want buildings; venture schools being converted into board schools come under improvement in one aspect and also expansion in another. If 1,500 venture schools are converted annually into board schools, we should have a very much larger number of children under instruction. Board schools so created would attract a very much larger number of boys than venture schools. These 4,500 board schools to be opened in three years would come under expansion. A large number of castes and classes have been recognized as backward and granted exemption from fees, and it was also proposed to extend the fee concession to poorer classes of the community. This would come again under expansion of education. Then it was proposed that 1,000 additional teachers should be trained annually in a two years' course by temporary arrangements. The Honourable mover or the seconder seemed to speak, as though the training of teachers was improvement of education. The training of teachers is not a matter to be relegated more to the improvement of education than to the expansion of education. We cannot have education at all without trained teachers. I think it must be clear to any body that we cannot draw a hard and fast line between expansion and improvement of education. The Government will not be acting wisely if they should consent to extend education without any thought of improving the quality of education to be given or what is called, improvement of education. You cannot get a committee which can lay

down hard and fast lines as to what proportion of funds should be devoted to expansion and improvement. I am instructed by the Government to oppose this motion because the Government are unable to see that such a committee as the one proposed would be able to do any useful work."

"The Honourable Member went on and suggested that this committee should not only concern itself with education and with such matters as the proportion in which the educational expenditure should be divided between expansion and improvement but also that it should survey the whole field of the finances of the Government, the whole policy of the Government and decide where the money is to come from. I had no conception that any such proposal would be made by the Honourable Member. And I am not perhaps entitled to answer it. But speaking as a mere departmental head the proposal appears to me to be impossible; and I would remind the Honourable Member that in the Finance Committee of this Council, he has exactly the machinery which he wishes to set up for reviewing the financial policy of Government and making any proposals that he and other members may think necessary to bring forward."

"The Honourable Member who seconded the resolution made rather a strange remark, I am afraid I have not got it *verbatim*. I believe he said that there was an impression abroad that more money was spent on inspection than instruction. We have been furnished with copies of the Civil Budget Estimate and the Financial Statement and the Hon'ble Sir Alexander Cardew has told us that these are final. I should have thought that the Honourable Member, before speaking of impressions, might have taken the trouble to see the facts of the case. I had no idea that I would be attacked on this; otherwise I would have had the whole thing carefully tabulated. I find that on inspection Rs 8½ lakhs is to be spent out of a budget something like one crore of rupees. I hope Honourable Members will not carry away from this debate the impression that we are carrying on inspection at the expense of instruction. At present, we have an inspecting staff—it is admitted by every body who has studied the facts of the case—which is wholly inadequate. We have Sub-

assistants who have to inspect schools for grants—some of them have as many as 250 schools to inspect. In addition to the formal inspection for grants, there are the visits to schools to check registers and to see how schools are getting on. If the Honourable Member only sees the work of Sub-assistants he will find that their number is inadequate. Instead of spending too much on inspection, I think we are spending far too little, with the result that the control exercised over schools is not satisfactory. I know that to put it crudely we have been cheated and so long as we have not got an adequate staff we shall continue to be cheated by teacher-managers who put up false registers and get more money out of us than they are entitled to get."

The Hon'ble the RAJA OF RAMNAD:—"May I move an amendment to omit the words about the appointment of a committee and to add the words 'and publish the same for criticism.' My amendment will run thus:—'*This Council recommends to His Excellency the Governor in Council to formulate a scheme for the expansion and improvement of elementary education during the next ten years and publish the same for criticism*'"

His Excellency the PRESIDENT:—"After the debate on the general subject is at an end, there is no reason why the Honourable gentleman should not move his amendment."

The Hon'ble Mr. K. SADASIVA BHAT:—"I beg to second the amendment."

His Excellency the PRESIDENT:—"I do not think this helps us at all. Is this the time to ask us to put aside every work and set to work to formulate a scheme for the expansion of elementary education for the next ten years? May I ask the Honourable gentleman whether this is the moment, when the outlook is not sure and definite when in his own private business he would sit down and formulate a scheme for the conduct of his own private business for the next ten years. I do not think I need say anything more. I hardly think it justifiable for the Honourable Member to ask the Government to set to this work at this moment. There are some people who think that it is a solution of all difficulties to look at them sternly in the face and pass them by; but it does not help us a bit. I do not

for one moment complain that this Council should draw attention to the need of our doing everything in our power to advance education and especially elementary education in this country at the present time; but it is no good blinking the fact that we are not in a position to publish or formulate schemes for anything for the next ten years. I would suggest to Honourable Members in framing resolutions that they should recognise that fact. I do not complain that there should be emphasis laid upon the necessity of advancement in education; and so far as the point is concerned there is no reason to object at all to such a motion as that. But when you actually propose and really ask us solemnly to appoint a committee for such a purpose under the present circumstances I suggest that our inability to accept such a motion is obvious and it need not be stated by the Government. It is a great disappointment to Government no less than to non-official members of this Council—it is an intense disappointment that much of administrative work must be checked; it was a part of the loss inflicted upon us by the war of which the Honourable the Director of Public Instruction has reminded us; it is a part also of our duty to end that war. But while the war is going on, I do suggest there is no public advantage in moving such resolutions as this. The facts are so certain and the elements are so uncertain, that it will be of no public advantage to ask a certain number of gentlemen, officials and non-officials, to give a part of their time to frame a scheme for the next ten years. The first half of our deliberations would be taken up in saying that it would be a much waste of time to go on with it. Under these circumstances I am inclined to suggest to both the Honourable gentlemen that they would do wisely not to press their motions."

The Hon'ble the RAJA OF RAMNAD :—"I beg to withdraw the amendment."

The Hon'ble Mr. K. K. R. KAVALAPPARA MUPPIL NAYAR :—"Rather than have this resolution, it is better to have an amendment. I would suggest that after the word 'appoint' insert the words 'when circumstances permit' and also omit the words 'during the next ten years.'"

The Hon'ble Mr. T. RANGA ACHARIYAR :—"I beg formally to second the amendment."

His Excellency the PRESIDENT :—"I do not like to intervene again, but I would suggest to the Honourable gentleman that he had better reserve his liberty to move the amendment. The Government will also reserve their right. It is almost a hypothetical motion, when you say 'when circumstances permit'; when it is to be, it will be in the judgment of the Council to pronounce an opinion upon."

The amendment was, however, put to the Council and lost.

His Excellency the PRESIDENT :—"I do not know if the Honourable Member Mr. Krishna Rao wishes to press this motion."

The Hon'ble Mr. A. S. KRISHNA RAO :—"Though I have considerable hesitation in withdrawing the motion, I hope it will be understood that I have duly considered all that has been stated by Your Excellency and the Hon'ble Mr. Stone. I waited to see whether this resolution would be accepted in any of the amended forms suggested by some of my Honourable colleagues. When those amendments have not been accepted I have no alternative but to ask that this motion be put to the vote. But before I do so, I wish to explain my position briefly. I have taken into consideration the fact that the world war must cause us any amount of anxiety until its successful termination, for which all of us are praying. The Hon'ble Mr. Stone asked whether the scheme to be drawn up by a committee, could possibly be different from the scheme drawn up for three years. I do not think it necessary to criticise that scheme, because the Government must have been satisfied with the inherent defects of that scheme, when it could not be carried into execution, owing to want of funds. Will the Government be in a position to assert that behind that scheme there was any definite allotment of funds? I suggest that the committee which is to be appointed should consider the question of funds, because I feel that no scheme will serve any useful purpose, unless it is framed with the knowledge of the funds available for the purpose; otherwise, there is no use in preparing a scheme or in circulating it or publishing it. No useful purpose would be served by that. It is in view of that that I suggest that a scheme should be framed which should

take into consideration the funds available for the purpose and that we should proceed to work out the details for expansion of education within a prescribed period of time. If I did not take into consideration the financial difficulties of the times, I would have framed the resolution asking the Government to cover the whole field of education. If we were in a season of financial prosperity and were assured of a definite source of income, I should have requested the Government to frame a scheme at once so as to cover the whole field of education. I only suggest that we might have a definite idea as to what we can do even with our normal resources in ten years. The suggestion that I have made is a simple one. I am not asking a scheme to be framed without taking into consideration our financial resources. If we open 1,000 schools in one year, the next year 2,000 and the third year 3,000, it must satisfy us that there has been a proper scheme framed in view of our financial resources. I do not want Your Excellency to go further than that. A scheme might be drawn up in view of the present financial circumstances of the Government. If our financial resources improve there is nothing to prevent us from opening more schools. It need not be an unnecessarily ambitious scheme. Still I feel that a well considered scheme, in the framing of which both the representatives of the people and the Government may take part, will certainly clear the ground and pave the way for further reforms. The Hon'ble Mr. Stone pointed out the difference between improvement and expansion of education. Suppose the Government say that 4 lakhs was available for education, is it not possible for the committee to say how much of it should be available for expansion and how much of it for improvement of education? That question should not be so lightly brushed aside as it has been done in this particular case. No difficulty will occur if my resolution is accepted. It is not the insistence of the scheme that I ask—of the scheme already framed by Government but which has not been carried out owing to want of funds; but what I ask is that a committee should be appointed to take into account all the circumstances and frame a scheme."

His Excellency the PRESIDENT :—"I think I had

better put the motion to the Council. I am sorry that the Honourable gentleman does not see eye to eye with us in this matter. I know he is an enthusiast in education. If you do not know what amount of money you have got you could not know the amount of money that you could give to education and still less can you say how much you can give to elementary education. So far as the money and the amounts available are concerned, we are all uncertain and therefore I am sorry that the Government cannot see eye to eye with the Honourable Member. I must therefore put the resolution to the Council."

The resolution was put and lost.

RESOLUTION re PROMOTION OF VERNACULAR SCIENTIFIC LITERATURE.

The Hon'ble Mr. A. S. KRISHNA RAO :—"The next resolution that I have the honour to move is as follows:—

'V. This Council recommends to His Excellency the Governor in Council to take steps to promote, encourage and assist the publication of vernacular scientific literature.'

"It is a simple resolution and does not involve any large expenditure of money. It is not likely to embarrass the Government, as regards their financial resources. I hope that this will meet with a better fate than the last resolution. It was in 1914, at the April meeting, that a discussion was raised in this Council about the publication of vernacular scientific literature. It will be remembered that on that occasion it was pointed out that it was highly necessary that the masses who were mostly illiterate and most of whom were unacquainted with English should have the means of becoming acquainted with scientific literature. It is for that purpose the resolution was moved; and after discussion the resolution was lost. There are two reasons why it is highly essential that some further attempt should be made in that direction. It is well known that for the improvement of sanitation in this country various Conferences have been held; and various steps have been taken to improve rural sanitation. Sanitary Conferences were held at which papers were read. The Pilgrim Committee investigated the matter and the press also con-

tained various suggestions on the subject. All these things show unmistakably what changes should be effected before the sanitary condition of the villages can be improved. Can any one with a sufficient knowledge of the sanitary condition of the rural parts say that the recommendations of the Sanitary Conference can be carried out, unless some means are devised whereby scientific knowledge is brought home to the masses. That is the problem which underlies the resolution; and as to the ways and means by which this problem is to be solved, I shall deal later.

"There is another aspect which deserves consideration. It is accepted by the most responsible administrators in this country that the present system of education whereby persons are forced to learn even the rudiments of sciences, and non-language subjects, in a foreign tongue, must be done away with. It is a matter for satisfaction that Lord Chelmsford in opening the Conference of the Directors of Public Instruction gave sympathetic expression to this sentiment,—that it is not at all desirable that persons should be forced to learn subjects in a foreign language. Unless scientific literature is made available in the vernaculars and unless means are devised by which further text-books are brought into existence, much improvement cannot be expected. For these reasons I hope that Your Excellency will take steps to promote, encourage and assist the publication of vernacular scientific literature.

"Regarding the publication of scientific literature we have to consider the matter from two stand-points. One is the production of text-books on scientific subjects and secondly publication and circulation of scientific ideals amongst the masses. Both these courses have to be adopted in solving the problem. It will not do if one alone is thought of and no attention is paid to the other. The reply that may be given is that the Government cannot be expected to subsidise vernacular scientific literature, that there is no proper demand for it and that the Government have been doing something for the dissemination of knowledge about scientific truths. It may be pointed out that whenever some publications were made which the Government thought were useful such as treatises on plague, malaria, etc.,

they were translated and circulated. What I now wish to place before this Council is that when once we are satisfied about the necessity and desirability of improving vernacular scientific literature, let us pause for a while and see whether we have done all that is possible to be done. Two courses are open—to encourage the study of vernacular scientific books and secondly to substantially help or give grants to persons who have taken upon themselves the task of bringing out such scientific text-books. It is a matter within the knowledge of the Council that there have been some societies which have taken upon themselves the task of preparing scientific text-books. The Vignana Mandal Series must have attracted the attention of the Government; the Tamil Sangam of Madura have been publishing contributions on important subjects. These facts show unmistakably that people are anxious to promote the publication and dissemination of scientific literature. But it is a difficult business; and it is also a costly business for which some further impetus and support must be given by the Government. If the Government will lay down definite rules whereby special amounts or subsidies can be given for the publication of books, much useful work can be done; and it cannot be argued that the Government cannot support such literature when the Government have already contributed for the preparation of the Lexicons which in themselves are calculated to improve the knowledge of the vernaculars and improve scientific literature in the long run. The Government have accepted the principle already; and having done that, is it too much for Your Excellency's Government to go a step further and see if further assistance cannot be given for the encouragement of vernacular scientific literature? If this liberal policy is pursued, scientific truths will become more widely diffused among the people."

The Hon'ble Mr. K. R. V. KRISHNA RAO:—"I have much pleasure in seconding the resolution. In April 1914 a resolution similar to this was brought to the notice of this Council by my Honourable friend Mr. Ramachandra Rao. He then suggested the desirability of encouraging the publication of books on scientific subjects in the vernaculars of the Presidency. This resolution sug-

gests that it is necessary to encourage and assist the publication of such a literature in the vernaculars. My Lord, it is more or less agreed that it is in the interests of the school-going population and that it would be to the efficiency of education, to have all non-language subjects taught, as far as possible, in the vernaculars of the country; and besides a knowledge, at least a rudimentary knowledge, of scientific principles and of scientific subjects, is necessary in the matter of improving sanitation and it is necessary that hygienic subjects should be taught for the sake of health.

"My Lord, it is necessary in the first place that proper terminals for scientific words will have to be invented, found or coined in the various vernaculars; and it is also necessary that suitable text-books should be published and the publication of these books encouraged by their being prescribed in the school. That is what is contemplated by this resolution. Unless the Government take in hand and try to encourage the publication of scientific literature by prescribing these books in schools it is not possible to bring about any publication of literature on scientific subjects in the vernaculars of this Presidency.

"Again, my Lord, in reply to the resolution which was brought before this Council in 1914 by my Honourable friend Mr. Ramachandra Rao it was said that the Government whenever they found it possible and whenever they found that any publication deserved Government support, they were purchasing a number of copies of such publication and thereby giving the encouragement to such publication; but the kind of encouragement that is now required is more than what the Government have been doing hitherto by purchasing a few copies or a few hundreds of copies of books published. The Government should not only try to subsidise and encourage the publication of such books but they should try as far as possible to find a demand for them, by prescribing as courses of study such books as may be found acceptable by the Education Department, on scientific subjects. My Lord, I understand that a sum of Rs. 10,000 has been given to the Madras University in aid of giving prizes for the publication of vernacular books on scientific subjects by Mr. Ramarayanimgaru.

That was announced in 1913 during the visit of Lord Hardinge to Madras. There is that small contribution made by him towards that purpose. And it is more or less in the hands of the University. But what is required of this Government is what this resolution suggests that they should take this matter seriously into their consideration and provide a means for a number of books being published on useful scientific subjects in the various vernacular languages of this Presidency and encourage their publication by prescribing them as suitable text-books in schools. That is what, I understand by these words "encourage and assist the publication." I think, my Lord, that unless the Government turn their attention to this aspect of the matter and see that some books are published on scientific subjects a most important branch of learning will not be made known to the people. It is said that a great hindrance in the way of sanitary progress is education. Attempts should be made to dispel illiteracy. Unless books are made available which can be read by people with advantage, they will not be able to derive much benefit from education, unless suitable text-books are published on scientific subjects and made available. It is for these reasons I heartily support that the Government may be pleased to take steps in order that suitable text-books on scientific subjects may be published and their publication promoted and encouraged. With these words I heartily second the proposition."

The Hon'ble Mr. J. H. STONE:—"Your Excellency, I should like to begin by saying a word or two as to the way that scientific knowledge can be acquired. Honourable Members who have spoken on this resolution seemed to think that if only you have got books in a language which you understand you will be in a position to acquire scientific knowledge. I do not think I can too emphatically repudiate the truth of that idea. You cannot learn sciences, assuming, I mean that you have had no scientific training, by simply reading little books about them. These series mentioned to-day mostly consist of what I might call text-books on elementary sciences. The promoters of such text-books have taken the sciences most taught in the schools such as physics and chemistry and the natural sciences. I deny that any one who has not undergone training in physics and chemistry can derive any benefit by taking up a text-book on these subjects; it cannot

be of the smallest good to the people who have not had any English education and who wish to read things in the vernaculars, because they cannot, in the nature of things, have an instinctive perception of the facts contained therein. The series referred to did not sell—the series that had been produced, did not sell—they did not disseminate scientific literature; they remained on the shelves of the extremely well-meaning people who produced them. The Government are now asked to give an honorarium to the gentlemen who have produced the series. That is what we are asked to do. I will put it in this way:—If you give an honorarium, will these books sell any better? Will the scientific literature be any better disseminated? I say 'No.' Secondly, if these books sell and scientific literature is being disseminated, there is no need to give an honorarium. That is a dilemma from which I am unable to escape.

"So far I have been talking of scientific subjects in general. The Honourable gentlemen have been talking of scientific text-books in the schools; but that is different from that of scientific literature. I have more sympathy in the matter of text-books being placed in the hands of school boys. If you put a book in the hands of a school boy and use a sufficient amount of coercion, you can make him read it. As regards the number of text-books I see from the notes that I have taken of the debate I seem to have made some kind of promise. What I did say was that I would consider how the department could co-operate better with the publishers in the production of school text-books. I must confess, except that something has been done in the way of providing text-books in Uriya, that very little has so far been done; and if I have not done more than what I have done in trying to secure co-operation between the department and the publishers it is because we have been occupied mostly with framing curricula as I mentioned at the last meeting, we have been busy with the business of making curricula for students taking up the school-final course and also for the courses of study for the first, second and third forms, where some Honourable Members seem to think that rudiments of sciences are taught in an alien language. It is not so; we do get people to teach them in the vernac-

ulars in forms I, II and III. I am getting a course of study made out not only for the three higher forms, where we have already had them, but also for these three lower forms. With the aim we have in view, as regards the teaching to be adopted in the three lower forms, we shall be able to see something more definite done in the way of the production of text-books. The production of text-books will have to depend upon the settlement of the curricula. We shall not be long in getting the curricula out for these lower forms; and then I shall be able to see or to tell the publishers what the department can do about the production of text-books and possibly to invite them to co-operate more than the department has been inclined to do so far in the matter of the production of the text-books."

His Excellency the PRESIDENT:—"Perhaps the Honourable gentleman will be satisfied with the reply."

The Hon'ble Mr. A. S. KRISHNA RAO:—"Yes, my Lord. I need not pursue the matter further. I hope that the Hon'ble Mr. Stone who has himself admitted that he has not been able to do much except in the Uriya language, will see his way to encourage the production of text-books in other languages."

With the permission of His Excellency the President the Resolution was withdrawn.

—Fort St. George Gazette.

PROVINCIAL EDUCATIONAL CONFERENCE, CUDDALORE.*

It gives me great pleasure to welcome you to your labours at this large and important Conference.

The time before us is extremely limited, and we shall have to get through the various items of our work as expeditiously as possible and in as business-like a manner as possible. Unnecessary elaboration of points which are substantially agreed to by all who have been following educational questions closely has to be avoided; and

* Address delivered by Mr. K. Natesa Aiyar, M.A., L.T., Asst. Inspector of Schools, South Arcot District, as Chairman of the Reception Committee.

non-contentious resolutions passed quickly by signifying the approval of the members present. I shall not therefore take up your precious time by holding forth overlong over such general remarks and views as alone fall within my province as Chairman of the Reception Committee.

The speech of this functionary, it appears to me, might be conveniently dropped. But here it is not for me to talk logic but to obey established practice and custom.

I consider it one of the happiest signs of the times that the teacher has, of late, awakened to a consciousness of his position in the social economy of our land, and is slowly growing more and more articulate. The vague and condescending platitudes about the dignity of the teachers' profession coupled with the cheerful acceptance in practice, as "a settled fact" of it as "the sorriest of trades" by those who formerly spoke up for teachers as their benevolent patrons, have yielded place to a state of things, in which the teachers by their own combination, vigour, and pushful work, are claiming that position in social life which is theirs, by rightful labour and service for the motherland. But we are yet only in the beginning of things. A great development awaits this process, and the development, if faithfully and strenuously carried out, is full of fruitful auguries for the future.

The teacher, indeed, cannot be too insistent of his rights and privileges. For, when he makes such claims he will take care to see, by sedulous self-cultivation, that he deserves them, and that he does not fall behind the times, and is fully as well informed, as practical and as business-like and successful in his own work, as others are in their avocations. Exclusiveness and isolation in modern days and under modern conditions of civilised society, spells death—slow death, it may be, but eventually sure death and this through the neglect of others and through the self-neglect to which it leads. I would like that much more of the current thoughts, feelings, strug-

gles, hopes and aspirations, which form the bulk of our social and mental life, should pass through the teacher's mind and heart, and be imparted by him, purified of all their shallower and impurer elements, to the younger generation. He should indeed imbibe more of the spirit of the age into him, and radiate more of it out of him, than he does now. He, more than all other strugglers in the present, has the privilege of being a direct link between the present and the future; and much of the up-turned look of the young and ardent, who will soon be the leaders of the next generation is necessarily directed to the countenance of the teacher—from which they should be able to catch beams of hope, of good-will, of honest and cheery activity, for the amelioration of their country and their country men. Believing, as I do, all these things, I have the intensest gratification, at the opportunity accorded to me of welcoming you, in the name of the teaching profession of this District.

I will proceed now to indicate—more than mere indication is not possible within our time-limits—a few outstanding problems in our educational system, which represent an obvious and glaring misfit with the aims and aspirations of our people, and their progress to a higher intellectual and moral activity.

The first of these, to my mind, relates to the place which the vernaculars should occupy in the curriculum. There are three distinct questions in this connection, which should not be confused with one another. The first is the recognition of a study of the vernacular literature—its best treasures, its noblest specimens—as forming an essential and integral portion of the mental discipline to be gone through by every one who aspires to a University degree, and an honoured place as one of the cultured and the enlightened of the land; that is in other words, the according to the most important vernacular authors, of a place in the collegiate curriculum, which is absolutely equal to the English authors.

and therefore, of course, compulsory. No man, in the Tamil land, for instance—who has not made a direct and first-hand acquaintance with some at least of the works recognised as classics in the Tamil literature, is to be regarded as having had a liberal education. A serious and appreciative—almost a reverent study of the best, that has been thought and felt, and musically and impressively expressed by the most gifted men of the race, ought to be compulsory, along with a study of the masterpieces of English thought and wisdom—the indispensableness of which, for our existence and progress as a member of the community of modern nations, is already acknowledged and acted upon, thanks to Macaulay and other generous long-seeing statesmen of an elder generation of English rulers of our land. To ask for this, is certainly not asking for too much, or for anything extravagant or erratic. To make room for this is very easy. We have only to do what the Mysore University have resolved to do, namely, to drop the History of English Language in the B.A. curriculum. I honestly believe that this discipline would make the inner life of our young men richer, purer and more harmonious, and impart to them a sweeter manner, a more companionable spirit, a more gentlemanly breeding, and a readier sympathy with all that makes for the happiness and progress of their humbler fellow-men. The movement of the national life will be more rapid and active, and the preservation of the best elements of our racial character, which is so necessary for evolution into something really original and distinctive will be ensured.

All that I have said above would apply to Sanskrit literature also, which may be an alternative to the vernacular literature; for Sanskrit literature is as much a casket of the finest perfume, of our racial quality—intellectually and morally—as vernacular literature.

If the Sanskrit or Tamil or Telugu room in School or College is relegated to the attic or a

corner of the outer verandah—if the post of the teacher of Sanskrit or Tamil or Telugu is one of the meanest paid ones—this open and shameless badge of inferiority is one which we have branded upon ourselves—because of our lack of self-respect, because of our lack of manly patriotism. For, I have never yet heard, that Government, Syndicate or Senate ever forced this upon us, or ever put obstacles in the way of Colleges and Schools initiating this reform. This is most certainly and most obviously a matter in which the *cue* has to be given by private bodies. Also the manner in which existing facilities for the higher study of the Sanskrit and vernacular literature is utilised is not such as to convince those who are in authority that we hold the study of them to be a most precious element in the soul-culture to be provided for the intelligent and the aspiring among us.

The second question connected with the vernaculars is their use as media of instruction of the knowledge subjects. Here I take it that there is practically a consensus of opinion that up to the School Final Course instruction may and perhaps must be imparted in the vernacular. But I will put before you the following suggestion. It is this. This question should not be decided without a consideration of the entire Secondary curriculum. More attention, much more attention, has to be paid to the attainment of a good working knowledge of English than now in the lower forms. And with a view to the releasing of time and effort necessary for this, a good deal of what passes for science and history teaching in the lower forms may be dropped. English, Vernacular, and Elementary Mathematics should be the principal subjects taught till the end of the Third Form. And science, geography and history lessons should be incorporated in the Readers, and the teaching of these should form part of the teaching of English. Similar lessons in these

subjects written in modern vernacular may be taught along with vernacular Readers. Systematic science teaching is unnecessary, and in fact is found in present practice to be merely nominal in so far as any fruitful assimilation by pupils is concerned. So far as my experience goes, on account of the extremely poor knowledge of the languages both English and vernacular on the part of the pupils, all instruction in history, science, and a good part of the instruction in geography, represent so much waste of effort. Accuracy of thought, accuracy of language, mental elasticity and mental freshness, are all sacrificed in the attempt at a premature forcing of astronomical, physical and chemical concepts which all require a robust ground to thrive and germinate in. Entire periods of history extending over centuries and millenniums and involving tens of thousands of events, names of places and persons, and a knowledge of tens of distinct atmospheres of social and political being, tens of hundreds of geographical facts relating to all continents and countries in the world—simply deluge the bewildered boy. He has not only to hear but to remember and repeat all these at examinations. The boy's mind rebels at being compelled to digest the indigestible. He has no interest in the facts themselves but only in repeating them to the teacher and getting marks. More of language and literature lessons will increase curiosity, vivacity, mental alertness. And on this soil, elementary science, history and geography can be planted with much better prospects of reasonable success than now. A teacher teaching a class of pupils with a fair and adequate grounding in English or the vernacular will find he can teach in six months, much more happily and effectively, what is attempted with imperfect success in three years. A lightening of the curriculum in the three lower forms is imperative on various other grounds also.

In the IV and V Forms, Indian History,

Geography and Elementary Science may be taken up and finished, the medium of instruction being the vernacular. In the VI Form, which has to be regarded as the course, which, on the one hand, gives a finish to the Secondary career, and on the other, as forming a preliminary to the collegiate education, the B group may be eliminated from the teaching, and the present A and C groups retained as teaching material for the year. The course in the C group especially in science may be lightened with great advantage. Even if this be not done, I believe that students being better grounded in languages, and better prepared for intelligent and active assimilation of whatever is taught to them, will cope with their work with much more alacrity and success. And failures will not be anything like so depressing as they are at present. As all boys by now must have learnt something of History, Elementary Science and Mathematics, they may be able with the help of the teachers better to select their optionals for the C group. The anomaly of having to teach a lot of subjects in the VI Form, which do not form subjects for examination which is felt to be so irritating to high school teachers will be removed. There will also be less of cramming and less of sham work of all kinds. I do hope, indeed that most Headmasters will find in this a solution of many difficulties. I put it before you for careful consideration.

Some say there are no good text-books in the vernacular in the knowledge subjects and therefore vernaculars as media of instruction is impossible. This is merely a restatement of the problem and not argument. Why not call up a competent body and entrust them with the work?

The third question connected with the vernacular problem is not so much concerned with schools and colleges as with the large body of the cultivated people of the Presidency. I refer to the creation of a modern vernacular literature, capable of reflecting with effect, the present day

thoughts and problems; so that the mind of the people may be stirred to a livelier appreciation of their needs, economic and civic, and so that a civilised Western government might not be hampered, in its ministry to the people, at every step, by ignorance and distrust, and the apathy that arise out of these.

And this leads me to the great problem of Elementary Education which is indeed the problem of problems. In this, fortunately, there is no difference of opinion and no controversy to reckon with.

It is purely and mainly a question of the availability of the necessary public funds. No large and comprehensive programme, extending over say—ten or a dozen years—which alone would be of any use will be possible, unless a steady and stable flow of recurring grant is provided. I fear that Board Schools are, for one reason or another, rather too costly for rapid expansion to be possible. If the opening of new schools and the provision of accommodation for them, could be entrusted to strong and well-selected committees, while the departmental officers look to the instruction and equipment, and both are made to co-operate together with definite annual grant-in-aid guaranteed for a term of years I think it would be well. And a special officer appointed to give general advice and guidance in the process of expansion would inspect the work of these committees in the several Districts and would make special annual reports, marking step after step, the progress and completion of the entire ten-year programme. Village school-sites selected and approved by the committee should be granted free. The building, very simple and cheap, will be undertaken by private managers of schools as now, only helped with sites and special grants, and supervised over and encouraged by the local committees.

Teachers' Association Halls at important centres might minister to groups of villages near at hand and continue the work of training schools,

and even in my opinion, in several cases, take the place, to some extent of Training Schools, if properly used by the present body of officers known as Supervisors of Elementary Schools. Some kind of agency is necessary to keep even trained teachers up-to-date in methods; and some kind of agency is necessary to serve as a kind of half-way-house to improve existing teachers, if training schools in sufficient number cannot be provided to manufacture trained teachers. I believe Teachers' Association Halls with libraries and appliances and periodical meetings presided over by the Supervisor or the Sub-Assistant Inspector can be provided at comparatively small cost to meet this. I am sure that proportionately to the cost they will bring in immense advantage.

The enlargement of the list of backward classes, i.e., of classes, who might read free in Board Schools has reacted adversely on the fee-receipt of Aided Schools. At the same time, the grant-in-aid to these schools, has not at all been enhanced and stands at the old rate of Rs. 3 per mensem for each teacher and $\frac{1}{2}$ or 1 Rupee per annum for each pupil ordinary or backward. The disparity between the position of the Board Schoolmaster and that of an Aided Schoolmaster, is too steep at present: and unless something is done to improve the present scale of grant-in-aid, it would be impossible to prevent all trained teachers perpetually looking forward to employment in Board Schools and consequent depletion of Aided Schools. Questions connected with Local Fund Elementary Schools should never be decided without taking into account Aided Schools also, otherwise unlooked-for complications might arise detrimental to the expansion of Elementary education.

The Boy Scout Movement, intimately associated as it is with the physical and social side of education which has hitherto been all too sadly neglected is full of potentialities for the future. And I would most earnestly bespeak your best

thought and energies to an adaptation of the movement to our conditions in a form that would be most practicable and most practically useful in the future life of our boys. The underlying idea is capable of realisation in a thousand varied forms; and there is no school or institution, however poor or however peculiarly circumstanced, that cannot devise for itself, a form of activity that would promote health, heartiness and helpfulness, union and co-operation, capacity for both obedience and leadership, resourcefulness, and, a self-confidence not inconsistent with modesty—these qualities, so essential for happiness and success in life both in school and afterwards, require special opportunities to develop themselves in boys. Such opportunities can be afforded only by means of these scoutings and by means of play-grounds and hostels.

The active, the indefatigable, the cheerful sprite Ariel, who gladdened the heart of Prospero, his benevolent master, by carrying out his behests with promptitude, neatness, and clean finish, and so earned his freedom is the type which the boy-scout, loyal to the behests of his motherland should be helped to realise. Or shall we rather put before him, another and a nobler pattern of loyalty springing up with joy at the call of sympathy and service? I mean the strong, the devoted, the gracious-minded, the sweet-tongued Hanuman who went to seek out afflicted Sita and carry to her the message of rescue.

In regard to play-grounds, our big towns have been allowed to become rapidly congested with no provision made for reservation of open grounds for public and hygienic purposes. And, ignorance, apathy, and a lack of foresight, even now seem to reign, making us acquiesce in a helpless policy of drift, even in the case of smaller towns, and unions and villages, where, perhaps, it is not too late, to avert the process of disastrous and foolish budding.

All local bodies require to be peremptorily impressed with this aspect of their duty, and the obligation should be embodied in the rules and regulations laid down for their guidance, so that, they can never take action, or refrain from

taking action, in regard to open spaces without reckoning with public educational and hygienic needs of the future. A blind, stolid and improvident generation breeds and spreads without thought and without fore-vision, without discipline and without humane consideration for their children and their children's children. And so, we have, now, problems which are difficult or almost impossible of solution because the previous generation had been helpless and inhuman. As human fathers provide for human sons, as individuals, so also should human communities provide for human communities. And that stability and ordered comfort of living out of which grow the amenities and graces of higher and intenser living, should be ensured by vigorous sacrifice and will, and determined foresight. Similarly, if our countrymen could only realise, in the proper way, what issues are involved in the building and proper conduct of hostels, I should think there would be a much readier flow of benefactions than has been the case hitherto. Much yet has to be desired also in respect of that play of personal forces, that interfusion of character with character, and soul with soul, in which the full fruit of the hostel system consists. Improvement here will come only with the steady flow to the teachers' profession of the best and the brightest men available among us.

Another subject for practical consideration, to which the attention of the general public should be engaged by bodies like this Conference, is the medical inspection of schools and school children; so that, suffering and waste and misdirection of energy and effort might be avoided. Authoritative and expert guidance could protect us at least from the more obvious and glaring of the physical evils attendant upon school life and connected with school children. How many short-sighted children have we seen who are simply allowed to grow worse and worse until they become blind and a burden to themselves and to others!

Gentlemen, I have but barely touched on a few subjects to which I thought attention may be given. Kindly pardon the sketchy way and

abstract form in which the observations have been thrown. I now beg permission again to express my cordial pleasure at meeting and welcoming you all here, and, I am deeply thankful for the opportunity that has been afforded me for doing so.

STUDENTS AND POLITICS.

Government Order—No 559, Home (Education), dated 1st May 1917.

The attention of the Government has been drawn to the attempts which have of late been made to bring students in schools and colleges under the influence of a political propaganda. His Excellency the Governor in Council is strongly of opinion that, in the interests both of educational advance and of the youths themselves, it is unwholesome and undesirable that students shall be involved in such discussions, and he has arrived at the conclusion that the time has come when action should be taken to deal with this tendency. His Excellency in Council believes that to this end the parents and guardians of the students in question can give valuable aid by using their influence against the practice of students taking part in political agitation, and he trusts that they will realize the grave responsibility which lies on them in this respect. It is necessary also that the educational authorities should use their powers in the same direction. The disciplinary regulations which are contained in Chapter VIII-A of the Madras Educational Rules already contain certain directions on the subject. It has, however, been represented to His Excellency in Council that the directions in this chapter are insufficient to meet the present situation and that it is necessary to supplement them by further instructions. The Government therefore direct that no undergraduate student in any college and no pupil in any school shall be permitted to take part in public political discussions, to attend political meetings, to join any political association or to take part in any movement with which it is, in the opinion of the educational authorities, undesirable that persons

still in *statu pupillari*, shall be associated. His Excellency in Council directs that heads of colleges and schools, whether under public management or otherwise, shall strictly enforce these directions. In doing so they should have regard not merely to the declared purpose of a meeting, but also to the speakers who will address it.

(True Extract.)

R. RAMACHANDRA RAO,
Secretary to Government.

Correspondence.

F.A. Course and Matric. Examination under old bye-laws of the Madras University.

SIR,

According to Rule 141 of the old bye-laws of the Madras University, those candidates who possessed term certificates of having completed the F. A. course, and those who had passed the Matriculation examination not less than four years previously to the F. A. examination, were both eligible to appear for the F. A. examination. Thus these two sets of candidates were accorded equal treatment for reasons which are well known to the University.

Now it is understood that the privilege of appearing for the Intermediate examination is only granted to the term certificate-holders mentioned above. It was thought that this concession will also be granted to the old Matriculates as a matter of course. But by some misfortune or other their case has been ignored. It is, therefore, very earnestly requested that the privileges be, in justice, extended to the other set of candidates also, i.e., to those who have passed the Matriculation examination not less than four years previously to the last F.A. examination. As this case seems to be a clearly strong and just one, it is considered not necessary to trouble the authorities with any further arguments.

TRIVANDRUM,
9-5-17.

P. SESA AIYENGAR.

MAY 1917.]

REVIEWS AND NOTICES.

Reviews and Notices.

THE TUTORIAL CHEMISTRY—PART II.—METALS AND PHYSICAL CHEMISTRY, BY G. H. BAILEY, D.SC., PH.D. (CLIVE: LONDON). 4s. 6d.

The book is characterised throughout by clearness of treatment; and the descriptions of experiments and explanations of laws are simple and yet precise. Section I contains a sufficient number of practical exercises and the questions at the end of every chapter may be very much helpful to the student. A proper study of Chemistry consists in a proper understanding of the *Periodic classification of elements*, the chapter on which is well-treated in the book. Equations are given wherever they are necessary and *Reversible Reactions* are clearly explained. The methods recommended are quite *up-to-date* and the history of the subject has been sufficiently attended to. *The chapter on Radio-activity* is full of interesting information. Section I which treats of Physical Chemistry, may be consulted with advantage even by advanced students in Colleges; and Section II which treats of Metals, by all students of Chemistry.

INDIAN HISTORY IN THE CLASS-ROOM, 1600—1857, BY H. L. CHABLANI, M.A. (SIND PUBLISHING HOUSE, HYDERABAD, SIND). pp. 469. Price Re. 1-12-0.

This book is a compilation of notes on British Indian History, intended to supplement the information given in College text-books on the subject. The plan on which the notes have been written is good, and includes exhaustive information on the various topics, stages and aspects of the growth of British rule in India. Not merely does the author quote authorities for his statements on all controversial points, but he sets forth differences of opinion among historians, where such exist with exhaustive and appropriate quotations from standard authorities. Each chapter contains a series of questions for revision and subjects for essay-writing; and these specially useful features of the book enable the student to really grasp the subject and not merely cram it. The book familiarises the student with all important secondary authorities bearing on the period, and the teacher can, with the help of this ground work, very well concentrate the attention of the students on the really important aspects of the subject. The arrangement of facts is clear and methodical, and the language correspondingly simple. And we

have no doubt that the book will prove highly useful to students appearing for the various University examinations.

ESSAYS ON THE CHILD AND HIS EDUCATION, BY MISS CORRIE GORDON, LECTURER, TEACHERS' COLLEGE, SAIDAPET. (SRINIVASA VARADACHARI & CO., MADRAS.) Re. 1-8-0.

This is an admirable little book. Much useful information is condensed in these pages, and while it may take the beginner some time to perceive the point of a conclusion here or an observation there, the advanced student is sure to find every important detail in its appropriate place in the general plan.

Froebel is one of the world's great prophets, a mystic, and a seer, and it is by no means an easy task to appreciate the significance of his system or to expound the fundamental principles of his philosophical position for the benefit of the practical educator; and yet it is this difficult task that has been undertaken by Miss Gordon and accomplished with marked success. The essays are extremely practical, and the exposition which is logical and clear is conducted throughout in the light of the advanced educational thought of the present day. An ardent Froebelian, she is at the same time a discerning critic. Her discussion of the Gifts and Occupations, of the purposes to be kept in view, and the methods to be adopted, in employing them, shows her grasp of the profound philosophy of Froebel. There can be no doubt that the teachers who go through the book will be able to apply intelligently the principles of Froebel so as to be able to exercise 'a soul-awakening influence.' We would also specially commend the portion where a sharp contrast is drawn between the methods of Froebel and those of Montessori. The topics dealt with are indeed exhaustive; we should have preferred, however, to have passing references made to questions such as—what constitutes the essence of *play* as distinguished from *work*, how what have been called the 'bewildering paraphernalia' of the Gifts are consistent with the fundamental doctrine of freedom. But these are, perhaps, side issues that would not fit in with the plan of the work written on the present scale. The notes on Rousseau and Pestalozzi in the appendix, and the bibliography at the end, add to the usefulness of the publication. We strongly recommend it.

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7 MAY 21, 1917

PUBLICATIONS RECEIVED.

Philip's Free-Arm Writing Book, by G. C. Jarvis, B.A., Int. B.Sc. London: Philip. 6d. net.

Hand-Writing, by G. C. Jarvis, B.A., Int. B.Sc. London: Philip. 1s. net.

Johnston's Historical Atlas. London: Macmillan. 2s. net.

Provincial Geographies of India: Bengal, Bihar and Orissa, Sikkim, by L. S. S. O'Malley, I.C.S. Cambridge University Press. 6s. net.

The Granta Shakespeare: Coriolanus, edited by J. H. Lobban. Cambridge University Press. 1s. net.

A Simple History of England, by A. D. Innes, M.A. Bombay: Cooper. 14 as.

Dramatic History of India, by Flora Annie Steel. Bombay: Cooper. Re. 1.

A Short History of India in the Middle Ages, by Stanley Lane-Poole, M.A., Litt.D. Bombay: Cooper. 14 as.

Victor Hugo's Hernani, by M. B. Minch, M.A. and L. J. Gardiner, M.A. London: Clive. 2s. 6d.

Pre-Mussalman India, by M. S. Natesan, Hindu Secondary School, Trichinopoly. Re. 1-8.

Hindu Mind Training, by an Anglo-Indian Mother. London: Longmans. 10s. 6d.

A Reformed Method of Teaching English, by E. Stokes, I.E.S. Bombay: Longmans. Re. 1-4.

History's Back-Ground, Book II, by J. S. Townsend, B.A., and T. Franklin, A.C.P. A.R.S.G.S. London: Macmillan. 1s. 6d. net.

Lectures on Style and Composition, by E. Clasen. London: Macmillan. 3s. 6d.

Perdita in Tamil, by C. S. Ramasami Aiyar. Madras: Commercial Press. 2 as.

Books & Pamphlets from the C.L.S., Madras.

Evangelist's Handbook in Telugu, by S. S. Subbayya. 3 as.

Sir Monier Williams, by Henry Morris. 1 anna.

Handbook for Workers in Evangelistic Campaigns, by the Rev. H. A. Popley. 2½ as.

Experiences of the War, by Mr. A. Moffat. 3as.

Commentary on Timothy I, in Telugu, by S. B. Simon. 10 as.

The Epistle to the Hebrews in Tamil, by the Rev. J. Lazarns, B.A., D.D. 12 as.

How my Life was changed, by the Rev. S. Somasundaram, B.A. Tamil. 9 as.

Studies in the Lord's Prayer in Tamil, by the Rev. W. Stanley Dodd. 4 as.

C. L. S. Telugu IV Reader. 4 as.

Throne of Graces in Telugu. 6 ps.

Indian Educational Notes.

The Hyderabad University.—The following is a translation of a portion of the Press Note issued recently conveying His Highness the Nizam's sanction to the formation of a University for Hyderabad:—

"His Highness has been graciously pleased to pass the following sanctioning the founding of a University.

"That such a University be established as would impart modern and ancient Western and Eastern knowledge in such a manner that the defects in the present system of education will be removed, and the full benefit be derived from ancient and modern methods of physical, intellectual, and spiritual education, and with the spread of education the students' moral improvement be kept in view, and on the other hand higher research should also be carried out. The main object of this University should be that Urdu should be the means of imparting higher education, but at the same time English should be one of the compulsory languages. Consequently, I have the greatest pleasure in sanctioning, in accordance with the proposal, in commemoration of my accession to the throne (*gadi*), that arrangements be made for establishing a University for my Dominions at Hyderabad, and that the University be called "Usmania University."

Rural Schools in Travancore.—The Government of Travancore have passed the following order:—

His Highness' Government resolve to organise Rural Schools as per scheme appended to this order. The Director of Public Instruction will arrange for 20 schools with one class in each being started at once. The initial cost per school will be Rs. (12) twelve per mensem—Rs. (10) ten on account of salary to a teacher, and Rs. (2) two for contingencies. Provision for the expenditure will be made in the Budget for 1913.

APPENDIX.

I. These schools will be established mainly in rural areas, but they will be permitted to exist anywhere according to demand.

II. The school year will begin on the first school day after the 5th Kumbhom and will end with the

last school day before the 25th Dhanu, thus giving a vacation of about 6 weeks, Sundays, special holidays granted to the ordinary schools, His Majesty the King-Emperor's Birthday, His Highness the Maharaja's Birthday, and the New Year Day will be holidays for the Rural Schools. There will also be a short vacation of 30 days every year to be given according to local conditions in Chingom, Kanni or Tulam, a short recess of 15 days in Mezham, and 3 days' leave for Christmas.

III. Three hours' instruction a day should be considered sufficient. The working hours may be either in the morning between 7 A.M. and 10-30. A.M. or in the afternoon between 2-30 P.M. and 6 P.M. There will be six working days in the week.

IV. The chief aim should be the imparting of instruction in the three R's and in the methods of occupation in which the pupils are engaged.

V. The curriculum of studies in the several subjects will be as follows:—

(i) Language:—Malayalam or Tamil.—(a) Ability to read and understand ordinary printed books and manuscripts such as letters and documents. (b) Ability to write without mistakes letters, ordinary receipts and accounts of money spent, purchases made, &c., necessary to manage a small household.

N.B.—Special Readers will be prepared by the Department.

(2) Practical Arithmetic:—Ability to keep all accounts, to carry on bazaar transactions, to make calculation of interest on money investments, lending or borrowing, &c.

(3) Manual occupations:—Such manual occupation as is suited for each particular locality.

(4) Geography:—Very elementary knowledge.

Mysore University.—An Extraordinary Senate meeting was held on the 19th instant in the hall of the Maharaja's College, with Mr. H. V. Nanjundayya, M.A., M.L., C.I.E., in the chair, when there was a large gathering of Senators.

Mr. V. Rangaswami Iyenger moved:—"That the courses of studies for Engineering and Commerce Degrees in the University as drawn up by the Committee for Engineering and the Board of Studies for Commerce be accepted and recommended to Government."

Mr. K. Shrinivasa Rao, Chief Engineer, in seconding the above said that Engineers like Messrs. Y. Srinivasa Rao, Govindacharya, B. Seetharama Rao and three others were all trained in the local school. There were in Mysore facilities for teaching Civil, Mechanical and Electrical Engineering. The courses of studies would be common for all the three branches for the first 2 years and then they would begin to specialise. Mysore students need not be sent out for these studies and Mysore University would soon be a self-contained one.

XXIII

Rao Bahadur M. C. Rangaiengar supported the proposition.

Mr. K. Sankarnarain Rao, M.A., B.L., Advocate, said that in Bombay and Poona Colleges, seats were limited and Mysore students had difficulty in getting seats. Mysore would soon have an iron smelting factory in Shimoga and with such excellent chances and growing demands, Mysore must have its own Engineering course to satisfy its peculiar needs. There were enough irrigation facilities at Kannam, badi and Marikanane. All that had to be developed.

Rao Bahadur Shama Rao said that Mysore young men had to enter into bonds to serve in other places and if they entered Mysore service they were not required in British India.

Professor S. Krishnaswami Iyengar, M.A., pointed out some necessary changes in the ordinances and said that the standard must be raised to Intermediate.

Mr. C. M. Vijayaraghavachari, B.A., Circle Inspector of Education, urged that the standard of qualification for entering the Engineering College should not be lowered.

Mr. Venkatakrisniah thought that the entrance examination was enough. Technical books were at present well written.

Mr. Mcalpine observed that weekly essay writings would do no good. Reading of essay books was not enough. Rigorous and thorough correction was necessary. The correction must be careful, continuous and thorough.

Mr. P. Raghavendra Rao, B.A., B.L., Excise Commissioner, remarked that technical branches required no study of Dryden, Shakespeare, etc. They must go straight to the study of the profession.

Mr. C. Ramalinga Reddy observed that further discussion would serve no useful or definite purpose and that the house should go into Committee for further discussion.

The Senate having gone into Committee, there was an animated discussion. The unitary type of colleges was recommended. It was pointed out that unitary type did not necessarily mean one Principal for all colleges. After much discussion it was unanimously resolved that the Committee's report as accepted by the Senate in Committee be adopted.

Professor S. Krishnaswami Iyengar moved the adoption and Mr. B. Nagappa seconded. The proposition was carried.

COMMERCE COURSE

Rao Bahadur M. Shama Rao next moved that the Commerce Course be adopted in the Mysore University. The course was drawn up, after a careful study of courses, as obtained in America and other Universities, also Bombay.

The scheme provided for a practical course and would be improved after experience. The same would satisfy the present needs.

Replying Mr. K. Chandy, the mover said that the college fixed the course and the University conferred degrees.

Replying Mr. Nagappa, Mr. Shama Rao said that the expenses would not be much. The Professors of the Maharaja's College would teach the subjects.

The proposition was adopted.

MEDICAL FACULTY.

Dr. Mylavagnam presented the report of the Committee appointed by the Senate to draft a scheme and propose measures necessary to develop a Medical Faculty in the Mysore University and in doing so, said that there were enough facilities to start a Medical Faculty in Bangalore. Mr. M. C. Rangaiengar, B.A., in seconding the above said that if there was any Faculty that could be opened in Mysore sooner, it was the Medical. They had Doctors of European training and European reputation. Mr. S. Krishnaswamiengar offered remarks regarding the pay of professors. Mr. K. Shankarnarain Rao urged that Ayurvedic and Unani systems should not be omitted. Provision must be made for their study. If the Mysore University could not find place for them, they would not find a place in other Universities. Mr. C. R. Reddy supported the above speaker and suggested that the matter might be left in the hands of the Board of Studies.

Mr. Shankarnaraina Rao wanted that the Mysore University must give a recognition to those ancient and well recognised systems of medicine. Indian Botany must also be studied. The matter being put to vote, it was carried by a large majority. The proposition having been well discussed, Dr. Mylavagnam moved—

"That a Medical Faculty of the Mysore University shall be created from the 1st July 1917 on lines proposed by the Special Committee and that the Council be authorised to take the necessary steps to carry it out within the appointed period."

PROVINCIAL EDUCATIONAL CONFERENCE UNDER THE AUSPICES OF THE SOUTH INDIA TEACHERS' UNION AT CUDDALORE.

RESOLUTIONS.

I. This Conference begs to convey to His Imperial Majesty King George V through His Excellency the Governor of Madras their unflinching loyalty and deep devotion to the British Crown and prays for early victory to the Allies in the present European War.

Moved from the Chair.

II. This Conference conveys its heart-felt condolences to Their Excellencies Lord and Lady Chelmsford on the irreparable loss sustained by them in the death of their gallant son the Hon. Lieut. Thesiger.

Moved from the Chair.

Mr. Humza Hussain seconded and the proposition was carried after some discussion about the time-limit.

The following propositions were carried.

HISTORY.

That the course of study for the M.A. degree as drawn up by the Board be adopted. Mover: Mr. N.S. Subba Rao, and Seconder: Mr. Thomas Denham.

MENTAL AND MORAL SCIENCE.

That the course of studies for the B.A. Examination in Mental and Moral Science as fixed in Ordinance 52 be modified as recommended by the Board and brought into force from 1st July 1917.

That the course of studies for the M.A. Examination in Mental and Moral Science as drawn up by the Board be adopted.

Mover: Mr. Shama Rao, and Seconder: Mr. M. C. Rangaiengar.

(c) SANSKRIT.

That the course of studies for the M.A. degree in Sanskrit, as recommended by the Board in Memorandum (A) of their Proceedings, be adopted.

That, if the M.A. degree is also to be instituted in Kannada combined with Sanskrit, the General Part A (Classical Language and Literature) in the proposed Sanskrit M.A. course be adopted for the Sanskrit part of this degree, the course in the Kannada part being settled by the Kannada Board of Studies.

That the Sanskrit syllabus under optional subjects for the B.A. Degree Examination as detailed in pages 14 and 15 of the First Ordinances be modified as suggested by the Board in Memorandum (B) of their Proceedings and that the new course be brought into force from 1st July 1917.

Mover: Mr. Karpur Shrinivasrao, and Seconder: Mr. M. Hiriyanna.

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III. This Conference earnestly calls upon the members of the Teaching profession to contribute to the utmost of their capacity to the War Loan and otherwise help to make it a success.

Moved from the Chair.

IV. This Conference exhorts all young men of eligible age in the schools and colleges of South India to enrol themselves in the Indian Defence Force and trusts that they will make a patriotic response worthy of this Presidency and also calls upon all parents and teachers to facilitate and stimulate such enrolment to the best of their ability and opportunities.

Moved from the Chair.

V. This Conference places on record its extreme sorrow at the loss the cause of education has sustained by the death of one of its warmest advocates, Rao Bahadur Professor M. Rangachariya.

Moved from the Chair.

VI. This Conference offers its heartiest congratulations to Rao Bahadur K. Seshu Iyer of Mayavaram and Rao Bahadur K. V. Rangaswami Iyengar of Trivandrum on the title of 'Rao Bahadur' conferred on them by the Government.

Moved from the Chair.

VII. (a) This Conference reaffirms the resolution of former Conferences praying that the promised scheme of a Provident Fund for teachers be given effect to as early as possible.

(b) While expressing satisfaction at the fact that the Managers of some Aided Schools have introduced the Provident Fund Scheme, this Conference urges upon the Managers of other institutions to introduce the scheme in their institutions as well.

Proposed by Mr. V. Venkatasubbaiya (Madras)

Seconded by Mr. C. Achyutanarayana Aiyar (Chidambaram)

Supported by Mr. N. Visvanatha Aiyar (Madurantakam).

VIII. This Conference is of opinion that in the interests of the general progress of the country, the time has come for elementary education being made compulsory in municipal areas and prays Government to formulate and sanction a scheme for carrying out this object.

Proposed by Mr. M. K. Acharya (Malabar)

Seconded by Mr. S. K. Krishnamoorthi Aiyar (Perambore)

Supported by Mr. S. S. Krishnasami Aiyar (Karur).

IX. (a) This Conference is of opinion that such portion of the Imperial recurring grant of four lakhs as may be set apart by the Local Government for Secondary Schools be distributed evenly among them in proportion to their numerical strength, with a view to improve the pay and prospects of the teachers thereof.

(b) This Conference is further of opinion that in the disposal of the remaining portion of the Imperial grant a substantial part be devoted to the improvement of the pay and prospects of teachers in Aided Elementary Schools.

Proposed by Mr. P. A. Subramanya Aiyar (Triplicane)

Seconded by Mr. K. A. Viraraghavacharyar (Madras)

Supported by Mr. K. Ramanuja Aiyangar (Chidambaram).

X. This Conference urges upon the Government that for the proper working of the S.S.L.C. scheme it is essential that the majority of the members of the S.S.L.C. Board be chosen from among the members of the teaching staff of High Schools.

Proposed by Mr. N. S. Arunachalla Aiyar (Namakkal)
Seconded by Mr. N. Kalyanarama Aiyar (Tirukattupalle)
Supported by Mr. Rajaratnam James (Ellore).

XI. This Conference is of opinion that any changes contemplated in the S. S. L. C. scheme or in the syllabuses be published in the Gazette and opinions invited thereon from Teachers and Teachers' Associations before such modifications are submitted to the Government for approval.

Proposed by Mr. C. K. Krishna Aiyangar (Madras)
Seconded by Mr. C. S. Rangasami Aiyangar (Villupuram)
Supported by Mr. S. Krishnamachariyar (Madras)

XII. This Conference is of opinion that the Chief Examiners for the S.S.L.C. Public Examination be selected mainly from the staff of High Schools and that the Assistant Examiners be selected entirely from among the teachers who are actually engaged in the teaching of various subjects in High Schools.

Proposed by Mr. T. S. Krishnaswami Aiyangar (Kulitalai)
Seconded by Mr. Sarangapani Aiyangar (Kumbakonam)
Supported by Mr. T. K. Dandapani Aiyar (Chidambaram).

S.S.L.C. Scheme.

XIII. This Conference is of opinion—

- (1) That the number of books for non-detailed study in English be reduced to two of not more than 250 pages on the whole.
- (2) That Elementary Mathematics be transferred from group A to group B.
- (3) That the choice of subjects in the C group be begun only in the Sixth Form.
- (4) That the subjects of group B be finished in the Fifth Form.
- (5) That Geography of the Indian Empire and a period of the History of India be made an additional subject in group C.
- (6) That Shorthand and Type-writing be treated as two separate subjects in group C.
- (7) That the Syllabus in group C Physics be lightened and made more definite, but that no main headings be omitted, and that the Syllabuses in Geometry and Algebra, and English History be also lightened.

Proposed by Mr. K.S. Venkatrama Sastrigal (Mayavaram).
Seconded by Mr. R. Parthasarathy Aiyangar (Chidambaram)
Supported by Mr. K. S. Rajagopalachariar (Villupuram)
Mr. R. Natesa Aiyar (Kumbakonam)
and Mr. V. Aravamuda Aiyangar (Madras)

XIV. That as a first step in making vernaculars the media of instruction the group B subjects be taught in the vernacular.

Proposed by Mr. N. R. Sundaram Aiyar (Villupuram)
Seconded by Mr. S. Rajagopalachariar (Madras).

XV. This Conference is of opinion that examinations, as they are, are already too numerous to conduce to the physical and intellectual progress of the pupils and hence is strongly of opinion that there is no need for a public examination at the end of the Lower Secondary Course.

Proposed by Mr. T. M. Venkatramana Iyah (Mayavaram)
Seconded by Mr. E. S. Venkatramana Aiyer (Tiruppur).

XVI. This Conference is of opinion that with a view to give freedom to parents to withdraw their children from religious instruction to which they have conscientious scruples, a conscience clause be inserted in the Grant-in-Aid Code for Indian Schools.

Moved from the Chair.

XVII. This Conference respectfully requests the Government to nominate from time to time representatives of the High School staff to be Fellows of the Madras University.

Moved from the Chair.

XVIII. This Conference is of opinion that in the matter of admissions of holders of S.S.L.C. into Colleges, the regulation framed by the Syndicate that a candidate should secure 5 marks more than the Presidency average or 40% in English and in one of the group C subjects, is certain to work great hardship and keep out a large number of deserving candidates from Colleges, and prays that the qualifying minimum in all the subjects be the Presidency Average or 35% whichever is less and that the recent regulations of the University insisting on a pupil who has secured the qualifying minima in certain subjects in the public examination should bring them up again the next time he appears for the public examination be rescinded and that he be asked to bring up only those subjects in which he has failed to qualify himself.

Proposed by Mr. A. Singarachariar (Madras)
Seconded by Mr. N. Kalyanarama Aiyer (Tirukattupalle).

XIX. This Conference is of opinion that it is necessary to institute in each High School a council of its teachers which should be consulted by the Headmasters, on all important matters affecting the welfare of the school.

Moved from the Chair.

XX. (a) This Conference is of opinion (a) that *bond fide* teachers be exempted from the production of the necessary attendance certificates to appear for all the University Examinations.

(b) that *bond fide* teachers who are holders of S. S. L. C. but who have to improve their certificates, may be allowed to do so without undergoing a supplementary course at school.

Moved by Mr. V. N. Rangaswami Aiyangar (Arni)
Seconded by Mr. V. Venkatesa Aiyar (Chidambaram)

Mr. V. Subbayya (Madras)
and Mr. N. Subramania Iyer (Villupuram.)

XXI. This Conference is of opinion that in view of the urgent needs of the country a new direction be given to the present day education by the compulsory introduction of manual training in schools.

Proposed by Mr. S. S. Krishnaswami Aiyar (Karur)

Seconded by Mr. S. Yagnaswami Aiyar (Kumbakonam).

XXII. This Conference is of opinion that medical inspection of schools is indispensable.

Moved from the Chair.

XXIII. This Conference is of opinion that with a view to afford proper training in citizenship, heads of institutions do popularise the Boy Scouts Movement in their schools.

Moved from the Chair.

XXIV. This Conference is of opinion that with a view to improve the efficiency of teaching in Secondary Schools, it is recommended that managements make provision for lightening the actual teaching work of masters.

Moved from the Chair.

XXV. This Conference urges upon the prominent gentlemen of the South Arcot District the necessity for opening at least one second-grade college at an early date, preferably in the head-quarters.

Proposed by Mr. C. S. Ranganatha Aiyangar (Chidambaram)

Seconded by Mr. N. S. Arunachala Aiyar (Namakkal).

Post-War Education.

XXVI. This Conference appoints a Committee consisting of the undermentioned gentlemen to consider and report on the reforms to be introduced into the educational system of this province after the present war and this Committee is requested to meet and submit its report before the 1st October 1917. The General Secretaries of the S. I. T. U. are authorized to print and circulate the report among the teachers and others interested in education in this province.

A list of 25 names is here given.

Proposed by Mr. K. A. Viraraghavachariar (Madras)

Seconded by Mr. P. A. Subramania Aiyar (Madras.)

Rao Bahadur K. Seshu Iyer of Mayavaram was elected President, Mr. V. Venkatasubbayya, Headmaster, High School Dept., Pachaiyappa's College, Madras, was elected Vice-President, Messrs. P. A. Subramania Aiyar and C. K. Krishna Aiyangar were elected Secretaries, and Mr. V. Subbayya of Pachaiyappa's College High School, Madras, was elected Treasurer.

A Committee consisting of representatives one for each District was also formed who were to be requested to start as many Teachers' Associations as possible in their respective Districts and get them affiliated to the S. I. T. U.

The Educational Review.

We have never hesitated to criticise adversely the measures of the Government, but we must confess we do

Students and Politics.

not find it possible to throw the blame of the recent circular* prohibiting the participation of students in politics, entirely on the Government of Madras, though we join our Indian contemporaries in disapproving of the order. To those who have watched the conditions of educational life in the Southern Presidency during the last one or two years, nothing could be more patent than the introduction of some unhealthy and even pernicious influences into the student world. Misguided enthusiasts have weaned them away, it may be with the best of motives, from their proper avocations, for what is alleged to be service of the motherland. The state of affairs is one which must cause some anxiety in the minds of those who are interested in the well-being of the rising generation in India and we are not surprised the Local Government has found it necessary to take some action in the matter—though it has erred in prohibiting even actual attendance at political meetings on the part of students. We have seen protests against the circular at political meetings and by some of the leading organs of public opinion in our country. With-

* The Government Order is reprinted elsewhere in this number.

out justifying the circular, we will only appeal to them to secure for our young men the conditions of intellectual development and expansion necessary to make them efficient and useful citizens of the motherland.

The Advisory Committees for Indian students Sproceeding to England, established in the various Presidencies,

Shall I go to England?

are evidently organisations intended to help students bent on foreign education. But we are afraid the pamphlet which has just been issued by the Committee in the United Provinces, through its Secretary, Mr. R. K. Sorabji, M.A., Bar-at-Law, under the title, *Shall I go to England?*, will only have the effect of damping the spirits of such seekers after English education. It almost seems intended to persuade Indian students, not to entertain the idea of proceeding to the Universities of Great Britain and Ireland, the evils of separation from home and country being carefully elaborated and catalogued and the advantages of English education receiving scant recognition. The beginning of the pamphlet is devoted almost entirely to sentimental sketches of Indian social life, good in themselves, but thoroughly unsuited as fare to be placed before those who intend to proceed to England for purposes of study, and we are afraid very few will survive the discouragement of the initial pages, to profit by the advice and help afforded in the latter part of the book. It may be that the Indian mother finds it very

hard to part from her son, even when he is leaving for such a laudable purpose as education, and is always thinking of what is happening to her boy, as to who attends on him in his illness and who cooks for him the dainty dishes with which motherly hands had familiarised him. We are also told that the writer knew an Indian father who was thinking so much of his son in England that when he found a person who had seen him, he wished him to stand up so that he might look into the eyes which had seen his son. There has been too much of the spirit of homesickness in the Indian student, and no useful purpose is served by intensifying it, in an age of competition, progress and adventure. Some 'roughing' in life and in strange lands will have a very healthy influence on the somewhat shy and reserved Indian student and we hope that at least Advisory Committees for Indian Students proceeding to England will not busy themselves in propagating such discouragement.

The Imperial Government of India have done a very valuable piece of service in reprinting part of the now well-known Commission's Report on the University of London, under the title, *The Essentials of a University in a Great Centre of Population*, and making it easily available to all those interested in higher education in India. The recommendations of the Commission have special interest in view of the Commis-

sion that is going to investigate the affairs of the Calcutta University this winter, but they have also a bearing on all the problems of Indian University Education. While the Report is full of the high academic spirit actuating the noblest University ideals, it also takes note of some of the developments of modern life, whose needs, it would be fatal for any University not to recognise. According to the Report, the essentials and non-essentials of a University are often confused and it is desirable to comprehend exactly what the former are. The special features of University education consist in association with other students: its difference in aim and scope from that of a secondary or a technical or a purely professional school; association of under-graduate and post-graduate work. Consistently with the development of modern social life, the Report pleads for the extension of the benefits of University education, to those who have already entered life by holding evening classes. While the organisation of a University Press and the publication of research and other papers is also looked upon as indispensable. A part of the Report is devoted to the features of University organisation and a detailed description of the means by which the above aims are to be realised. We trust the Report will be read extensively by all those interested in higher education in India. The publication, which is not for sale, is distributed widely by the Government of India, but those who are not reached by it, may very well order

the original report in its entirety from England.*

Principal Wood, C. S. I., of the Engineering College, Roorkee, has jumped into sudden notoriety of an unenviable type by what may be characterised mildly as a blazing piece of indiscretion. Assembling his students on the occasion of the last day of the term he read to them a very offensive homily on their duties as students, interspersing his remarks with wild and outrageous remarks on the want of truth and character in the Indian home. The speech was as impertinent in its audacity as it was false and offensive in its assumptions. The students were compelled to sit and listen to the following, with other remarks of an equally provoking kind: "Now it is an undoubted fact that all over India in the schools and colleges, and very markedly in the Universities, there is a great deal of what I may call 'crookedness', such as occasioned the late Calcutta Scandal to which I have just referred. What does this all point to? It means that a great many of the so-called Indian gentlemen are not gentlemen at all. Now to be perfectly candid with you I will tell you what is, I consider, the real cause of all this crookedness. It does not lie so much at the doors of the students themselves as in their home environment.

* The Final Report of the Commissioners of the Royal Commission on University Education in London. 2s.

There is undoubtedly a spirit of intrigue rife in a great many Indian homes, and the Indian student frequently passes the earlier years of his life in an atmosphere which is saturated with intrigue, so that if the boy starts his school or college career without the first essentials of a gentleman, it is not so much his own fault as that of his environment." We are not surprised that this speech has excited a storm of indignation all over the country and demands have been made in no uncertain voice for the removal of the Principal from the office. It is hardly necessary to point out that a person with such perverted notions of Indian character and home-life is hardly fit for the responsible office of the Principalship of an Indian College, and the sooner the demand is satisfied, the better will it be for everybody concerned. Every circumstance attending upon this annoying incident is calculated to add to the provocation. It was a printed document, read out after deliberate thought, on an important occasion in the academical year, the day students were to disperse for the long vacation. Instead of sending them home with thoughts that evoked pleasure and satisfaction, he has subjected them to the most gratuitous and offensive insults possible, by casting aspersions against some of their most cherished feelings in life, love and reverence for home and country. The most astounding part of the whole affair is that all this takes place at a time when the races of the Empire are being drawn together in service and comradeship of

very praiseworthy kind. Any amount of expert qualification cannot palliate this offence, and Principal Wood is only a non-educationist officer, retired from Government, who has been entrusted with the control of what is probably one of the most important institutions in the country.

We invite the attention of our readers to a national institution which has been doing commendable work in

the service of our motherland in the most unostentatious spirit, the Andhra Jateeya Kalasala, Masulipatam. We have before us reports of the work of the institution, since its inception in 1910, and we have no hesitation in saying that they constitute a record of wise design, strenuous endeavour and fruitful result. It has been started by a noble band of selfless workers, who have given their energies to the institution in the most ungrudging spirit, and whose moral inspiration is as valuable an asset as the actual work accomplished by them. Combining the aims of general education with those of technological training fitting students for entering life, the syllabuses are very wisely planned and are calculated to secure the best possible results in the present circumstances of our country. A noteworthy feature of the institution is the attention paid to the harmonious development of all the faculties of man, including the artistic and the spiritual, and thus attention has been paid to drawing as well as painting

and the daily routine includes the singing of religious hymns. The institution has been visited, and its anniversaries have been presided over, by very distinguished ladies and gentlemen, among them Sir Sankaran Nair and Mrs. Sarojini Naidu, who have all been very much impressed by the good work carried on within its walls. The Government has also come forward with an annual grant and we hope it will receive the very much wider sympathy and support which it so richly deserves.

The Educational Conference under the auspices of the South India Teachers' Union Conference was held at Cuddalore under the presidentship of Professor K. B. Ramanathan of Pachaiyappa's College, Madras. It is certainly striking evidence of the esteem in which Professor K. B. Ramanathan is held by the educational world of Southern India that he should have been asked to preside again over the session of this year, in spite of his having done so on more than one occasion in previous years. The delegates were welcomed by the local Chairman of the Reception Committee, Mr. K. Natesa Iyer, M.A., L.T., in a well-thought-out and interesting address* in which he drew attention to some of the leading educational questions of the day and the President followed with a speech characterised by his usual calmness, sobriety and independence. The Confer-

* Reproduced in full elsewhere in this number.

ence wound up with the passing of several resolutions* of importance. While on the subject of the South India Teachers' Union Conference this year, we should be failing in our duty if we did not plead once more for greater co-operation and effort in the direction of making this organisation a success. Nothing is more imperatively necessary for the advancement of the teaching profession, than the formation of efficient organisations of teachers, whose opinions will count in the direction of educational policy, whose support will be beneficial to every member of the teaching profession, and whose efforts will serve to add prestige to the status of the teacher. Without underrating what has been achieved in the direction in the past, we feel bound to remark that there is still scope for increased effort and wider organisation.

Faithful to its traditions, the Calcutta University is continuing to be a lively centre of excitement, and the

organisation of post-graduate teaching in the University is the subject that is now demanding attention. In accordance with the deliberations of the Committee appointed to consider the question of the efficient organisation of post-graduate studies in Calcutta, it has been decided to keep the post-graduate classes under the direct control of the University, allowing the colleges however a voice in the University Council which is

* Reproduced in full elsewhere in this number.

to be entrusted with the management of the work. Individual colleges will cease to have any provision for post-graduate teaching, which will all be carried on in a separate institution, on the staff of which there will be (1) the Professors directly appointed by the University who will be servants of the University; (2) Professors whose services are taken on loan for short periods from Government or private colleges; (3) Professors who are serving on the staff of colleges affiliated to the University, who may be engaged for the delivery of special courses of lectures at a remuneration to be fixed by the Council. With the large numbers of students that have to be dealt with for post-graduate teaching, the problems of the Calcutta University are peculiar to itself, and we should not venture upon any criticism of the scheme before all the details are fully worked out. But we are afraid the University is not well-advised in embarking upon such a scheme of the absolute separation of under-graduate and post-graduate work, and it is a very important educational consideration that underlies our opinion. As has been pointed out in the report of the Commission that considered University Education in London, the intimate association of under-graduate with post-graduate students is very advantageous to the student as well as to the teacher. "It is also a great disadvantage to the under-graduate students of the University that post-graduate students should be removed to separate institutions. They ought to be in constant con-

tact with those who are doing more advanced work than themselves, and who are not too far beyond them, but stimulate and encourage them by the familiar presence of an attainable ideal." Then again, with regard to the Professors concerned, the Report says: "Teaching will, of course, predominate in the earlier work, and research will predominate in the advanced work; but it is in the best interests of the University that the most distinguished of its Professors should take part in the teaching of the undergraduates from the beginning of their University career. It is only by coming into contact with the junior students that a teacher can direct their minds to his own conception of his subject, and train them in his own methods, and hence obtain the double advantage of selecting the best men for research, and getting the best work out of them. Again, it is the personal influence of the man doing original work in his subject which inspires belief in it, awakens enthusiasm, gains disciples. His personality is the selective power by which those who are fittest for his special work are voluntarily enlisted in its service, and his individual influence is reproduced and extended by the spirit which actuates his staff. Neither is it the few alone who gain; all honest students gain inestimably from association with teachers who show them something of the working of the thought of independent and original minds. 'Any one,' says Helmholtz, 'who has once come into contact with one or more men of the first rank

must have had his whole mental standard altered for the rest of his life.' Lectures have not lost their use, and books can never fully take the place of the living spoken word. Still less can they take the place of the more intimate teaching in laboratory and seminar, which ought not to be beyond the range of the ordinary course of a University education, and in which the student learns, not only conclusions and the reasons supporting them, all of which he might get from books, but the actual process of developing thought, the working of a highly trained and original mind.

Following the practice obtaining in some European countries, an attempt has been made this year, to organise a Summer Conference at Darjeeling for purposes of informal discussion and study of subjects of general interest. The movement is being promoted by Professor Patrick Geddes, the distinguished scholar and town-planning expert, whose name is very well-known in Southern India. The idea is to bring together people of different shades of opinion, Europeans and Indians, officials and non-officials, ladies and gentlemen, in the comparative leisure and freedom of a hill station, especially in the holidays. The main purpose of the recruitment of health has not been forgotten and provision has been made for a number of interesting excursions. An elaborate programme of social and biological studies has also

Summer Conference, Darjeeling.

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been drawn up and among people who are to lecture at the Conference are such distinguished gentlemen as Sir J. C. Bose, Sir Rabindranath Tagore and Professor Geddes, while among those who are to join the Conference are Justices Chaudhuri and Woodroffe, Sir K. G. Gupta, Dr. P. C. Ray and Dr. Brajendranath Seal. We wish the Conference every success and hope that the idea will find imitators in other parts of the country, as it seems to be full of the best educational potentiality for those who have left Universities and are engaged in solving the problems of real life.

The writer on Indian educational topics in the Educational Supplement of the *London Times* is evidently intended to be an expert, but we are puzzled by the reasoning and the conclusions he has arrived at, in the number of the Supplement received by the current mail. He apprehends there is great danger of the efficiency of University education in India being impaired by yielding to the wishes of certain sections of politicians in the country. We will not say that the fears are absolutely unfounded and we are equally anxious to keep the ideal as high as possible and would endorse the observation of Dr. Rashdall in his 'History of Mediæval Foundations in Europe': "The name of the University has got to be associated with education of the highest type; to degrade the name of a University is therefore to degrade our highest

educational ideal." But what are the facts which have driven the writer to such gloomy forebodings? They are two Resolutions moved at the last meeting of the Imperial Legislative Council, one by the Hon'ble Mr. Bhupendranath Bose and the other by the Hon'ble Mr. V. S. Srinivasa Sastri. The former desired that further action may be stopped with regard to the University schemes of Patna, Dacca and Nagpur, pending the conclusions of the Commission that has been proposed for the University of Calcutta. The latter wished to bring all the Indian Universities under the deliberations of the proposed Commission. If the Committee of 'winter' experts who are to sit in judgment over the Calcutta University, under the guidance of Dr. Sadler, are to advance University efficiency, it stands to reason that their advice should benefit Indian Universities as well, and the proposed new Universities should not be started before they could also take advantage of the guidance. It seems to us therefore that both the Resolutions were entirely in the interests of the efficiency which the foreign critic of Indian education is so anxious to safeguard, and the Indian politicians stand thoroughly blameless in the matter.

It is with profound regret that we have to record the death of one of our distinguished educationists, Principal I. Srinivasa Iyer of the

The late Principal Srinivasa Iyer.

Hindu College, Tinnevely, at the age of fifty-three. The early years of Principal Srinivasa Iyer's career as an educationist were spent as the head of the Brennen College, Tellicherry, and at a time when the Hindu College, Tinnevely, was in need of a particularly strong and efficient Principal, he was chosen to fill the place. He more than justified the hopes entertained of him and much of the success of the College in recent years was due to his energy as a disciplinarian and his capacity for organisation. He also did valuable work as Fellow of the Madras University and as member of the School Final Board. There are not many Indians in the higher ranks of the educational service, private or public, and it is a matter for genuine sorrow when any gaps are created among their ranks.

A striking instance of injustice done to the members of the educational profession is furnished by a recent action of the Government of Madras. Inviting the opinion of various persons on the recommendations of the Public Services Commission,

they could not make up their mind to include the name of a single educationist on the list. The recommendations of the Public Services Commission include the Department of Education and unless the local Government intend to treat teaching as the cinderella of professions, we see no point in the Government's desire to forego the benefit of advice from Indian representatives of education. It is possible to mention several esteemed members of the profession any of whom might have been consulted in the matter:—Principal Ramanujachariar of Vizianagrum; Principal P. T. Srinivasa Iyengar of Vizagapatam; Principal R. Venkataratnam of Cocanada; Professors K. B. Ramanathan and K. Ramanujachariar of Pachaiyappa's College, Madras; Rao Bahadur K. V. Rangasawmi Iyengar of Trivandrum; Professor S. Krishnasawmi Iyengar of the Madras University and so on. Evidently none of these satisfied the curious critical taste of the Government of Madras and we will only say, we do not see much statesmanship in the action.

The Educational Review

A Monthly Record for India.

VOL. XXIII.

JUNE 1917.

No. 6.

All literary contributions, books for reviews, newspapers or magazines, sent in exchange, &c., should be addressed to the Editor, No. 4, Mount Road, Madras. Articles and communications intended for publication in the succeeding issue should, as far as possible, reach the Editor not later than the 20th of the month. The Editor solicits contributions on all subjects of educational interest. Stamps should accompany the MS., if the writer wishes it returned, in case of non-acceptance. The Editor can in no case hold himself responsible for accidental loss.

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SOME SUGGESTIONS FOR IMPARTING BETTER AND MORE USEFUL SCIENTIFIC TRAINING TO OUR YOUNG MEN IN SCHOOLS AND COLLEGES.

PRACTICE should not be entirely divorced from the theoretical course of instruction. At present, students of Science in Arts Colleges, work as if shut up in dark, (light-tight) cellars where the light of every day needs and wants of civilized, human life may not penetrate. They are thus totally cut off from the world—their scientific lore hangs like a dead weight upon their heads, they are utterly incapable of applying it usefully for the correct solution of practical problems requiring only a smattering of practical knowledge. For example, of what use is his knowledge of the Principles of Photometry, the Law of Inverse Squares or the Cosine Law governing the Intensity of Illumination at a point to a student of Science, if he cannot practically find out the candle-power of his reading-lamp and thus satisfy a natural craving of his heart for better acquaintance with the objects of his daily use.

We grant that the Universities and Colleges of India require their graduates in Science to pass a practical examination in the various branches of Science. What we ask here is if that course of practical training in Physics, Chemistry or any other branch of Science, which is usually undergone by a Science student before his graduation, effectively, calculated to help the student in grappling with the problems he has to face each day of his life or to discipline his mind as an efficient scientist. Laboratory courses of practical scientific training, more often than not consist of making the students (go through) perform a number of experiments which are wholly of a theoretical interest only—experiments altogether detached from life, so that they have no direct bearing on the practical needs of daily life. Of what use, on earth, is it for a student, who cannot determine the resistance of a 16-candle-power carbon incandescent lamp or that of an electric bell with the wires to be used in its circuits, to have determined, in the laboratory, the resistance of a number of isolated pieces of wire or other such laboratory stuff by as many as half a dozen methods. It would certainly lead to a better

comprehension of the importance and the function of electric resistance in every day affairs if one or two practical methods of measurement were used for determining the resistance say of a 100-Watt tungsten lamp, than if the resistance of ever so many detached wires were measured by various methods never met with outside of a laboratory. What does it avail a student if after mastering the theory of the Lever and experimenting upon the moments of forces, he cannot calculate the mechanical advantage of a steel-yard or discuss the comparative merits and demerits of long and short arms ?*

It should not be understood that we want to confuse the course of instruction imparted in Engineering Colleges with the one given to non-engineering students in other Science Colleges. What we suggest is that (1) the gulf separating theoretical training in Science Colleges and practical training in Engineering Institutions should be diminished as much as possible and (2) the syllabus of studies for students of Science should be got up in such a way as to make them efficient scientists, able to grasp the ordinary practical problems of everyday life.

As a first step towards reaching this goal we would very strongly urge that Text-books of both Theoretical and Practical Physics should be heartily discouraged. It is the spirit which underlies these "texts" that is to be denounced :

* The problem of Archimedes, on obtaining the solution of which he had cried aloud 'Eureka! Eureka!' cannot be solved by an average B.Sc. class student. Give him a gold ring weighing a few grams (which means also a few Mashas) and ask him to detect if the goldsmith has used pure gold or mixed some silver with gold. He may have gone through half a dozen methods for determining the specific gravity of all sorts of substances and he may know how to apply the temperature correction or expansion of water, but you will find that in the application of Archimedeian Principle with the hydrostatic balance, he will be at a loss to eliminate the error caused by the suspension fibre. If you press him home with a few critical questions, you will find that he has no clear grasp of even the fundamental points involved.

it is meet and proper for a clergyman preaching to a mob to dogmatise and lay down a general statement or a "text" as an appropriate introduction for a Sunday sermon, but it does not behove a votary of Science to lay down "texts" or hard and fast rules before young minds which it is our object to train into scientific and rational methods of thinking.

Granting the entire elimination of text-books of Science, we would very much like to see courses of studies in Physics, Chemistry, etc., branches of Science especially written by experienced teachers of Science who could keep in view the special requirements of Indian students and copiously illustrated by examples borrowed from the affairs of everyday life. We would strongly advocate the introduction of only those methods of measurements in practical courses which besides supplementing the instruction given in theoretical courses should be practically useful in all walks of life.

There is another method of teaching Science which one would like to see introduced in Indian Colleges and Schools. We mean the heuristic method of teaching Science that has been so strongly advocated by Professor Armstrong. According to this method, the student is put as far as possible, in the position of the discoverer—no spoon-feeding is allowed and the student is required to arrive at the solution of a definitely stated problem exactly as if he were going to solve an original, unsolved problem. Of course, a certain amount of preliminary lore is assumed on the part of the student but beyond this, every step that he takes has to be proved by himself. Those desirous of getting thoroughly familiar with the working of the heuristic method should consult Prof. Armstrong's book on the subject. We would give here a few examples with a view to bring out the salient features of the method.

A student in the chemical laboratory may be asked to find out the cause of the rusting of iron

or another student in the physical laboratory may be required to study the details of setting up a barometer, whether it is necessary to have an open reservoir of mercury, the effect of placing a barometer inside a closed room and to find whether the open air reading differs appreciably from the reading taken inside a closed room and from this investigation to settle the size of the hole that would establish a thorough communication of pressure; similarly he might be asked to find out if the bore or shape—straight or curved—of the barometer tube has any effect upon the height of the mercury column. It would be clear that if a student makes any progress in the critical manner of direct inquiry, his knowledge would grow on a much more stable basis than that of the ordinary student working in a haphazard way in the laboratory. Examples can be multiplied and any teacher of Science can easily devise suitable exercises for his students. We will conclude here by drawing attention to the way in which a student may be asked to find out practically the laws of the transverse vibration of a string, instead of being merely required to prove them in the usual way. After he has devoted some time to the solution of the problem in hand, he may be asked to find out the density of a given thread or wire by the monochord method or to determine the weight of a given body with the Sonometer.

And now I would add a few remarks on the study of Science in general. To my mind, the distinguishing feature of the study of Science is to discipline the mind and prepare it for grappling with the problems of the world. A mind properly disciplined is a scientifically developed mind. It is not at all claimed that a scientific mind can solve all problems. Far from it. What is really claimed is simply this: that scientific education coupled with an intimate working knowledge of the methods of scientific investigation enables the students to attack any problem with confidence, when sufficient data are given.

It is one of the primary requisites of a *liberal education* in the modern and correct sense of the word that besides knowing everything, of something, one should also know something of everything, so that the mental outlook may not be cramped and obstructed by prejudices and misconceptions. Judged from this point of view, Indian students of Science are not at all liberally educated. As a matter of fact, according to the criterion laid down above, their intellectual horizon is very narrow so that any thing connected with life and not touched by their text-book formulæ is unintelligible to them. The defect can be remedied to a large extent only if the teachers (of Science) themselves are conversant with the scientific method and know the rudiments of some at least of the biological group of Sciences if they are teachers of Physics or Chemistry.

Science students in India seem to have caught the contagion from the Arts student. Just as the latter is, in this age of Rationalism and Science, an outcast from the realms of free thinking, similarly our Science students bury themselves in their text-books remaining altogether ignorant about the vast hierarchy of Sciences. No doubt it is an age of *specialism* and we do not want butterfly students of Science: but what I mean to say is, that students of Physical Sciences, although they may not (and they should not) try to march through the vast kingdom of Science, in general, from one end to the other, should not grovel in hateful ignorance concerning the highly illuminating and fascinatingly interesting Sciences of General Biology, Evolution, Sociology, Experimental Psychology, Astronomy, Embryology, Geology, Palæontology, Physiology, Morphology, etc., etc., that depth of view and expanse of the intellectual horizon which alone entitle one to be called by the exalted title of an educated citizen, necessitate a rudimentary acquaintance with the great group of the modern evolutionary biological Sciences.

besides Physics, Chemistry, Astronomy and Mathematics.

To recapitulate, the prime essential is not simply to stock the mind with facts but to digest and assimilate the great scientific ideas of to-day, to be thoroughly conversant with the scientific method of investigating truth, to develop the reasoning faculties, and last but not the least to foster a spirit of wider toleration for all kinds of opinions. It is thus, and thus alone that the grand principle of Evolution coupled with the inductive method of teaching should be harnessed into service for efficiently training the young minds of our students into scientific methods of thinking and enabling them to become better citizens.

F. D. MURAD.

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NEED FOR CERTAIN CHANGES OF OUTLOOK IN OUR EDUCATIONAL SYSTEM*

I

It needs no saying that the great European war of to-day has brought about a new 'angle of vision' in many things and that schemes of re-construction or re-adjustment are everywhere in the air. Not only will a political re-construction of Europe take place after the war but also a re-construction of the British Empire on federal lines. Such departments, again, as the military and the naval, are being, or will be reformed and re-adjusted to meet more adequately modern requirements. The problem of trade after the war is receiving much serious attention and a great many schemes have already been propounded in this connection. Amongst other things, the educational system of Great Britain is also being seriously examined and by official as well as by non-official authorities, reforms of various kinds have been suggested so as to make the system more national and more efficient. Haldane's famous speech in the Lords on the 'Training of the Nation,' the Report recently issued by the Education Reform Council, the series of educational articles appearing in English papers and magazines, Lord Fisher's proposals for educational reform—all these must be familiar to us.

If there is so much need for educational reforms in Great Britain much more need must there be for such reforms in this country where the system of education is least national and is characterised by shortcomings of various kinds. It need not therefore be observed that, amongst the post-war reforms to be considered in connection with this country, the subject of education should find a prominent place.

* Being the valedictory address delivered at the School Day Celebration, Government Training School, Trichur (March 1917).

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It is well-known to us that it was in the time of Lord William Bentinck that a system of English education was inaugurated in this country and further, that Macaulay played a leading part in this connection. Having regard to the ignorance that then prevailed about the value and importance of Eastern culture, nay the somewhat contemptuous notion entertained about it by Macaulay and his followers, we find that oriental studies were unduly neglected and that a mainly Western system was introduced. In the second place, considering that the immediate aim of Government was more or less to provide a sufficient supply of English-knowing clerks for Government service, the system was naturally reared on a somewhat narrow basis. In spite of a few re-adjustments and reforms that have since taken place, the system, in its essential features cannot be said to have been substantially modified or improved. It must however be observed that, having regard to the changed and changing conditions of the country—thanks to the century's English education we have had—and the new needs and interests appearing on all sides, the time has fully come for a shifting and broadening of the basis of the system so as fully to bring it into harmony with the requirements of to-day. It is proposed in this paper to suggest a few directions in which a new outlook seems to be needed in our system of education.

II

Before proceeding to do this, I will consider very briefly what are the aims and ideals of education. In spite of differences of opinion that have been held on this point from the time of Aristotle downwards, I think it is generally agreed that the true aim of education is the harmonious and all-round training of one's parts and powers—physical mental, moral, emotional and æsthetic—that it should not only enable a person to earn his bread but to lead a worthy and useful life, that it should prepare one for the duties of citizenship and for the patriotic service of his

country. The aims have thus been admirably summarised in the Report recently issued by the Education Reform Council of Great Britain:—“The reforms proposed have as their aim to widen educational opportunity; to train all for work and leisure; to utilise more effectively national resources both human and material; to fit the growing generation for the service of Home, Society and the State; to admit all to the quest for goodness, truth and beauty; to make better citizens.”

For the sake of clearness, the aims or features of education may thus be analysed:—(a) It should enable a person to earn his own living. (b) It should pay sufficient attention to the health and physical training of students and implant in their minds a love of exercise. (c) In intellectual education, sound and rational methods should be employed and the proper training of intellectual faculties be kept in view. Further, healthy intellectual tastes and habits must be cultivated. (d) In the system of education followed, the subjects and studies relating to one's own country must be given special attention. In this way alone can one be properly prepared for citizenship. (e) By proper attention to scientific and technical education one must be enabled to utilize and develop the resources of one's own country and thus add to its wealth and prosperity. (f) Sufficient attention must be paid to the development of character, of morals and emotions and of the æsthetic side of one's nature.

With the help of these touchstones, our present system of education will be tested and, dealing only with salient and outstanding features, it will be shown in what directions a new outlook is needed.

III

Judged from the standpoint of utility, how does our system of education stand? From this point of view, it must appear to us that our present system of education—elementary as well as high—

—is unsatisfactory and that a new outlook is needed.

Taking elementary education, what we find to-day is that it is mainly literary in its character, being practically confined to the teaching of the 3 R's. What I wish however to emphasise with regard to rural education is that, with due attention to the 3 R's, it should really be practical and useful in its nature, that it should be adjusted to rural conditions and harmonised with the rural environment. As regards the 3 R's, in themselves they do not constitute any education, they being only the keys 'to unlock wide realms of knowledge.' Hence not only should rural folks be provided with these keys but, what is more important, they should be provided with suitable opportunities for using those keys and not letting them rust. "Village libraries should be established, occasional lantern lectures on popular subjects might be instituted and periodical readings of religious and popular books be organised in the school. Village Panchayats, Co-operative Credit Societies, School Committees, all of which have great educative value would meet in the school and it might and should be the centre of culture for the neighbourhood."

Apart from all this, the outstanding feature of rural education should be that it is mainly practical in its nature and has a close bearing on rural occupations. The main portion of the rural population will be found to be agriculturists or artisans. Agriculture is the main occupation of India but its condition is anything but satisfactory. The ryots of this country will be found ignorant, backward, conservative and impecunious. There are a great many cottage industries in our country which, however, for want of sufficient encouragement, are gradually decaying. What is wanted, then, in the interests of rural folks is that, a network of rural, agricultural and industrial schools should be established where, not only theoretical instruction is given but, what is more important, practical training and

demonstrations also. In addition, such useful subjects as Hygiene and Sanitation should also be taught. If the country-side of India is to present such a bright and smiling aspect as that of other progressive countries, then it is education of this character that is needed.

Passing on to higher education, it will be found that, having regard to its narrow scope, the utility of this education too, as a means for making a living, is diminishing year after year. It is well-known to us that very few are the avenues of employment that now exist for our educated men and for which they are trained. These avenues will mainly be found to be the bar, Government service and education and they are getting more and more congested every year. What is wanted under these conditions is not only that some of these avenues themselves should, if necessary, be enlarged and more fully opened up to Indians but, what is more important, fresh avenues should also be opened up and our young men be trained for the same. In other civilised countries it will be found that, in addition to those already mentioned, such openings as agriculture, commerce, industries, literature and journalism, army and the navy, the Church, absorb a large proportion of the educated men and in this country too, avenues like these must be opened up. It must indeed be gratifying to us in this connection to observe that this subject has received the sympathetic attention of the Viceroy as may well be seen from certain encouraging remarks made by him in his recent Convocation speech at Calcutta. We will hope that the sympathetic policy enunciated by him will steadily be carried out and that, by and by, the country will be covered with a net work of agricultural, technical, commercial, technological and scientific schools and institutes so that not only will fresh avenues be created for our young men but also they will be enabled to utilise and develop the resources of the country

and thus contribute to its growing wealth and prosperity.

IV.

I will now proceed to make a few observations on physical education. It needs no saying that the health and the physique of our students are anything but satisfactory and that very inadequate attention is paid to physical training in our schools and colleges. The national physique of India is also reported to be steadily deteriorating and this is a circumstance which no well-wisher of this country can contemplate with complacency. It is indeed a lamentable fact that the life of educated Indians is getting more and more sedentary and that a large majority of them do not care to take any regular exercise. It is to this lamentable neglect of physical exercise and recreations on their part combined at the same time with excessive mental work, that, to no small extent, we must ascribe the premature death of many of our educated men, amongst whom must be counted some of the best and brightest sons of our land. The importance of physical exercise and training in our schools cannot then be over-estimated.

In the first place, arrangements should be made for a periodical medical inspection of pupils and reports should be sent to parents. The value of such inspection must be apparent to all. The greatest importance is attached to it in other countries and, with reference to British schools, the following valuable suggestions have been made by the Education Reform Council:—"All children attending school should be medically inspected annually. The parents should have the option of producing the required information, at their own expense, from their own medical attendant, in a form acceptable to the school medical officer.....The latter should examine special cases when requested by the Headmaster who may ask for authoritative instruction for remedial action to be sent to the parents.....The school medical officer can often give valu-

able advice as to the choice of careers for pupils after leaving school." A system like this may well be adopted in the case of our schools also.

In the second place, physical exercise of some kind or other should be made compulsory for every student. Plenty of playing space should be provided in each school and college and in addition to badminton and tennis courts, football and cricket grounds, there should also be race-courses and facilities, as far as possible, for swimming, boating, etc. It may also be considered in this connection whether any of our national games may well be revived in our schools or adapted to modern conditions. Every student should be required to take part in some game or other. In the case of poor boys who may not be able to go in for expensive games, some such exercises as walking, running, swimming or any form of indoor exercise none of which will entail any expense, must be insisted upon. In the case of primary children, they should be given frequent drill-movements in and out of the class-room and frequently taken on short excursions. In all these ways, not only should the physique of our boys be properly developed and their health safeguarded, but, further a love of exercise should be implanted in their minds.

V.

I will now proceed to consider the intellectual education obtaining in our schools. It is well-known that the main object of education kept in view in our schools is the passing of examinations. In this country, more than in any other, examinations are held in undue importance and consequently, real intellectual training is neglected in schools and hardly any attention is paid to the cultivation of healthy intellectual tastes and habits. Uneducative and cram methods are often employed so as to enable pupils to pass examinations easily. Hardly any attention is paid to see that the knowledge imparted is well assimilated by boys and, what is more important,

that a zest for knowledge is aroused in their minds. No wonder then that a great many of our educated men cease to be students once they leave school or college. Neither teachers nor boys however are very much to blame for this state of affairs seeing that, in this country, *unpassed* men are regarded as *uneducated* men and, with regard to employments, as *untouchables*. The holding of a degree or diploma has become a *sine qua non* for employment. Matters however seem to be somewhat different in the West. This is what Mr. J. O. Molony observes:—"All this is lunacy to the West where University education is prized but where a University degree is not an absolute condition precedent to the obtaining of a decent employment.....A young man is not an untouchable in the employment market simply because he is neither a B.A. nor a Matriculate.....On the day that he takes his degree the European feels that he is losing a paradise; on the other hand the Indian student, I suspect, must often feel that he is escaping from a Purgatory."

With a view to improve the state of affairs depicted above, the following suggestions, amongst others, may well be considered:—In the first place, the courses of studies, now too heavy, must be considerably lightened throughout. With a reduction in the quantity of work, the quality of work must improve. In the second place, a great deal of latitude must be allowed to teachers in several ways. Instead of being dictated to for anything and everything or being rigidly confined to a cut and dried syllabus, they must be allowed considerable freedom in handling their subjects and be encouraged to follow rational and intelligent methods, to make their teaching bright and lively and thus arouse interest in the minds of pupils. The conduct of examinations and the making of promotions, must, subject to proper supervision, be largely left in their hands. But then it is highly necessary that we must have the right kind of men as teachers—men of character and enthusiasm and

capacity. If such men are to be secured, it need not be said that the 'status of the teaching profession must be magnified' and the pay and position of teachers be considerably improved. In the third place, the number of public examinations must be diminished as much as possible and promotions made from year to year, from the results of the year's work of pupils as well as of an annual examination conducted without any 'terror.' In the case of little boys at any rate, nothing can serve so well as a public examination,

to repress their noble rage,
and freeze the genial current of their soul.

In the fourth place, it may be observed that, even more important than the imparting of a modicum of knowledge, is the cultivation of healthy intellectual tastes and habits in the minds of pupils—of a taste for knowledge, of a habit of observation, of a habit of research. Research-work is getting more and more important in this country and consequently some useful training must be given to our students in this work.

VI

It has already been observed that it is one of the aims of education to prepare a young man for citizenship and the service of his country and to fill his mind with patriotism. No system of education can be sound which does not fulfil these objects. If these objects however are to be secured, it is highly necessary that a student should be nourished on his national literature, that he should be acquainted with the culture, the traditions, the history and the conditions of his country and that, consequently, subjects and studies relating to his country be given the importance they deserve. Judged from this standpoint, our system of education will be found much unsatisfactory and a new outlook is needed in this direction.

Sanskrit, which embodies the national culture of India, is badly neglected in our schools and it

is possible for a student to pass from the lowest class to the highest, with absolutely no knowledge of this language. The Vernaculars too do not receive, in our schools and colleges, the attention they deserve. Thanks to the blessed School-Final System, Indian History has been relegated to an unimportant place. As for Indian Civics and Economics, Indian Arts and Sciences, Indian Philosophy, Indian Music, Indian Sociology, very little is heard about them in our courses of studies. The system of education at present obtaining amongst us is mainly of a Western cast and complexion and it may be pleaded in this connection, that it should be made a little more national. In making this plea, it is in no way meant that western culture may be safely neglected in our schools. It cannot be denied that immense benefits have accrued to our country from western education and that western literature and sciences have come here to stay. While their importance for the progress of our country can in no way be questioned, it should not, at the same time, be forgotten that subjects and studies relating to our own country must have even greater claims on our attention.

VII

Lastly, I will make a few observations on the training of the character, the morals and the emotions of our boys. It need not be said that the training of character and emotions is of the greatest importance and that no education can be sound which neglects it. Hence the necessity for a certain amount of religious and moral instruction in our schools.

The system of education that now obtains in our schools is mainly secular. Thanks to this godless system, it is seriously believed by many, that the character of our boys is being prejudicially affected. In the first place, we find that complaints are heard from time to time that a spirit of irreverence is growing up amongst them. Secondly, it is well-known to us that, habits of

plain and simple living are somewhat coming into disfavour with our boys and that all kinds of frivolous fashions, and luxuries, nay vices are gradually coming into vogue amongst them. Thirdly, it may be found that in their habits and modes of life, they are getting more and more unnational and that religion is coming to be sadly neglected, if not despised, by them. It is the conviction held by many that the only way in which these and other evils can be arrested and the character of our boys improved and moulded on national lines is by paying proper attention to religious and moral instruction in schools. This is what Mr. V. P. Madhava Rao recently observed:—"Morality standing alone lacks a sure basis and the highest development of character cannot be obtained in the absence of religious belief...The real psychological foundation of a firm and stable character could only be laid on religious belief. Only from belief, from those thoughts which range far beyond the limits of earthly existence, can come the vivifying, the liberating power which alone is capable of emphasising every aspect of reality. The more thoughtful minds in Europe are rebelling against the material civilisation of the continent and are trying to go back to religion and found morality upon it as the principle for the conduct of life."

In many countries of the West we do find that attention is paid to religious instruction in schools. In American schools a certain amount of such instruction is imparted. In many European countries, religious and moral instruction is an integral part of school work. With reference to England, Haldane observes that "he was quite sure there could be no comprehensive system of national training which would fit the rising generation to bear the burden that would fall upon them if ethical and religious training were left out of school."

Nothing can be a greater mistake than to suppose that religious and moral instruction simply

teacher. The graduates usually know much about the history of literature, but very little of the language. It would be well if the University makes it compulsory for every candidate for the degree to show a minimum of the knowledge of the English language—of spelling, of synonyms, of idioms and of correctness of expressions and refuses to confer degrees on such as fail to show this minimum. To effect this it would perhaps be necessary to discourage the mercenary annotator.

Something may now be said regarding the improved methods of teaching. First is the Direct Method of teaching English. Its underlying principle is that a language should be learnt through itself, and that it should be learnt through things rather than through the words of the language already known. It is said that this is the natural method of learning a language, that the mother-tongue is mastered through this method. This is right. But it must be remembered that in the case of the mother-tongue the direct method is the only method available and that all the surroundings are helpful. It is not possible to reproduce the surroundings in the case of the students who remain at school for a fixed number of hours. Even in the case of residential students exact reproduction is not possible. Again it should be remembered that very often mother-tongue offers the shortest cut. The difference between such words as *quiet* and *quite* cannot be grasped by students except through the use of mother-tongue.

It is therefore necessary to recognize these limitations. But what now happens is that the limitations are not recognized and the method is reduced to a mechanical process. Students quietly remember passages after passages out of their text and they give a correct answer only when the question asked is of a particular type, which immediately arises out of the particular construction of the book. If the form of the question is changed the students at once get con-

founded. Perhaps it may mend matters to some extent if the books from which the student remembers passages are dispensed with and the ordinary things of life are talked about by the pupils and their teachers.

Another difficulty in connection with this method is the inability of many teachers to avoid the vicious circle of other words which convey no sense to the pupils. The boy learns that 'depression' means 'dejection,' but understands neither. The writer has had an opportunity of giving tuition to his cousin who is studying in the Fourth Standard. His own experience is that it requires a great command over the language and a very great care to give suitable other words, such as do not help to form the vicious circle referred to above. Sometimes he finds it better to give meanings in vernacular. Another difficulty is that some teachers are unable to give proper definitions. Some notebooks of the students may be full of Johnsonian definitions.

The writer also deeply regrets to note that the use of the Translation Exercises has been discontinued. He himself learnt his English through these exercises and he has recommended their study to many backward students to their great benefit. It would be well if this study is revived.

A few words may be said on 'eliciting method' of teaching. The writer believes that when properly employed it is an excellent method of teaching. He has himself often used it and that with very good results. The method requires a teacher to make appropriate movements and to construct skilful sentences to make the students understand the meanings of words. The great difficulty with this method is that it demands an amount of ingenuity, originality and resourcefulness which many teachers cannot command. Appropriate movements do not occur to all teachers at all times.

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It should also be remembered that the meaning of a word is modified by the words surrounding it. Sometimes a word is used in a very peculiar way. On account of this, it is not possible to always construct sentences as would make the meaning flash through the mind of the student. It follows, therefore, that the limitations of this

method should be clearly recognized and that it should be entrusted to competent men only.

Thus have been briefly described the forces that, in the opinion of the writer, account for the deterioration of the standard of English. Incidentally suggestions for improving the matters have also been hinted.

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Copy of letter from the Inspector-General of Education in Mysore, No. 17885/1808, dated 2nd February 1917 :—

With reference to your letter, dated 10th November 1916, sending for opinion a copy of the book "Subodharama Charitham," I have the honor to inform you that the book has been spoken of well by the Text-Book Committee in Mysore.

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THE STUDY OF ANIMAL LIFE.

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SPINY-SKINNED ANIMALS (ECHINODERMATA).

THE reader would have noted that the Coelenterates are characterised by *radial symmetry*, i.e., their bodies present the same appearance all round. Most Coelenterates are fixed or at best slow moving. Hence radial symmetry is of special advantage to them, since they have to procure food from all quarters and defend themselves from enemies which may attack them from any side.

The group of animals now to be studied, the Echinodermata, are also characterised by radial symmetry, and since some of these are fixed and others are slow-moving forms, these animals too benefit by such a symmetry. It should, however, be noted that in the Echinoderms, the radial symmetry is superficial and not deep-seated, since some of the internal organs mar the symmetry. Development shows that the young echinoderm is not radially symmetrical, but bilaterally symmetrical (that is there is only one plane along which it can be divided into similar halves). Gradually as development proceeds, the body undergoes change of form and acquires a superficial radial symmetry which masks the former one.

Most of these animals are characterised by the presence of a skeleton which covers the body like an armour. Such a skeleton is called an *exoskeleton*, in contradistinction to an internal skeleton or *endoskeleton* as in man.

The exoskeleton of echinoderms consists of a number of pieces of calcium carbonate joined edge to edge. In some echinoderms the pieces are movably articulated, i.e. joined to one another. In others they are immovably fixed. In a few the skeleton consists of stray spicules of calcium carbonate, or is absent altogether. When pre-

sent, the calcareous plates of the exoskeleton usually bear on them spiny processes of various length; hence the name of this group. The spicules serve for defence.

Another peculiar feature of the Echinoderms is what is called the water-vascular system. It consists of a central ring-vessel with radiating branches. From these branches arise double rows of *tube feet* (Fig. 18), each of these ending in a flat adhesive disc or sucker. The whole system is filled with sea water and communicates with the exterior through a perforated plate called the *madreporite*. With the help of the tube feet the animals slowly crawl along the sea-bottom. This group includes (i) Starfishes, (ii) Brittle stars, (iii) Sea lilies, (iv) Sea-urchins, (v) Sea-cucumbers.

(i) *Starfishes* (Figs. 16 & 17). These are so called because their bodies generally consist of a pentagonal central portion or disc with five radiating arms, thus resembling the conventional representation of a star. The exoskeleton consists of calcareous plates movably articulated. On the underside of the arms are grooves through which numerous tube feet protrude. The grooves meet in the centre at the mouth opening. On the upper surface between two of the arms is the sieve plate (*madreporite*) leading into the water-vascular system. The madreporite, you see, destroys the radial symmetry.

You would have seen along the sea beach little shelled animals. The shell of each consists of two pieces hinged together. The moment you pick up or terrify such an animal it withdraws between the shells and draws them tightly together. The muscles which close up the shells are so strong that it is impossible to open them again.

The starfish feeds upon shelled-animals. You would probably wonder how it could get at the prey within the shell fortress. This is how it manages to do so. The starfish is very slow in

movement. This is a point in its favour, for its approach does not terrify the prey. The shelled animal continues to keep the shells agape. After getting to close quarters the starfish shoots out its stomach at the prey. This stomach manufactures a kind of juice which paralyses the prey, acting somewhat like chloroform. The poor thing is unable to draw the shells together and defend itself. It is then easily disposed of by the starfish.

Apart from the normal sexual method of reproduction the starfish can also develop, like the earth-worm, asexually. If it is cut into two, each half develops the missing parts and in course of time becomes an entire starfish.

(ii) *Brittle stars*. The body of a brittle star also consists of a central pentagonal portion, with long tapering arms. Unlike the starfish, the arms are devoid of grooves and tube feet. The brittle star does not, therefore, crawl like the starfish, but swims along by a lashing movement of its arms.

These animals when caught or otherwise in danger, have the peculiar habit of voluntarily going to pieces. This voluntary 'disintegration' has procured for them the name brittle star. (Fig. 19).

(iii) *Sea lilies*. These are somewhat out-of-the-way forms. They have highly branching arms and most of them have a stalk and live fixed to the ground. One stalk-less free-swimming variety, commonly called feather-star, is common along our coasts.

(iv) *Sea urchins* (Fig. 20). In these the calcareous pieces of the skeleton are not movably hinged to one another, but form a hard globular shell, the mouth opening being at the lower pole, and the other end of the food passage at the top pole. Sprunging from the shell are a number of calcareous spines which can be moved in various directions so that the animal looks like a ball of thorns.

If we remove the spines, or pick up from the sea-beach a dry shell which has dropped all its thorns [Figs. 21 & 21(a)], we see that the surface has two kinds of regions running from pole to pole. One set of meridional bands has perforated calcareous plates, through which the tube feet of the animal protrude when alive. Alternating with these are other bands the plates of which have bosses. These are the spicule-bearing areas. The bases of the spicules are concave, and form with the bosses on the plates, what are called 'ball-and-socket' joints. The tube-feet-bearing areas are for locomotion, while the spicule-bearing areas are for defence. The madreporite is on one of the plates surrounding the top pole.

The aw of the sea-urchin, called Aristotle's lantern, is a very peculiar structure found nowhere else in the animal kingdom. It consists of a five-rayed frame, surrounding the mouth and bearing five teeth, which, by muscular action, can be made to converge upon the food and crush it.

On the east coast of our Presidency two kinds of sea-urchin are commonly met with. One is the dark variety. The other is the coloured variety. In the latter, the spicules are much smaller than in the former and each has alternate white and red bands along its surface.

Heart-urchins. } so called from the shape of
Cake-urchins. } the shell, are also commonly met with. Look for them on the beach, after a storm, when the tide recedes. A good many of them get stranded along the beach. The spicules in these are very small and the tube feet are not arranged in meridional bands as in the sea-urchin but form a 'pelatoid' design at the top.

Those that wish to see sea-urchins 'at home' should visit the Madras Marine Aquarium or one of the two places mentioned in a former article, viz., Rameswaram, or the rocks on the coast of Vizagapatam. The latter have a number of

hollows, and almost every one of them lodges a sea-urchin. A visit to these at low tide will well repay trouble. One should, however, be careful not to venture too near the edge.

North-east of Waltair is what is called Lawson's Bay. A good number of sea-urchins of the coloured variety get stranded here, and may often be picked up.

(v) *Sea-cucumbers*. These are so called on account of the long cucumber-like shape of the body. Some have very long snake-like bodies. The mouth is usually surrounded by a ring of tentacles. The tube feet may be present or totally absent in the case of forms that lie half buried in the sea-bottom. The skeleton is poorly developed. It may be represented by a few stray pieces of calcium carbonate in the skin, or even these may be absent.

The sea-cucumbers have the peculiar habit of squirting out their internal organs when terrified. One English variety gives out a slimy secretion in the form of threads and is hence called the 'weaver.'

Some sea-cucumbers are edible.

Summary.

The radial symmetry of the Echinoderms, unlike that of the Coelenterates, is only superficial—advantages of this symmetry.

The exoskeleton of the Echinoderms:

(i) *Starfishes*—description—feeding—reproduction (ability to reproduce missing parts). (ii) *Brittle stars*—description—voluntary disintegration. (iii) *Sea-urchins*—shell of sea-urchin—Aristotle's lantern—common varieties. *Heart-urchins and cake-urchins*. (iv) *Sea-cucumbers*—why so called—structural peculiarities—the weaver.

To the teacher. The starfishes and brittle stars, by virtue of their exoskeleton can be dried and preserved. The shells of sea-urchins can also be similarly preserved. But if you wish to have

the tube feet of the starfish or the spicules of the sea-urchin intact, you have to bottle them in spirit. The coloured variety of sea-urchin had better be bottled in Formalin (Formal-de-hyde) solution, for spirit would destroy the colour.

Sea-cucumbers should always be bottled.

The Echinoderms are a totally marine group of very little importance to man. The study of them may well be omitted in inland towns.

SHELLED ANIMALS (*Mollusca*).

The shells of these animals are in the main composed of calcium carbonate.

A. MOLLUSCS WITH AN EXTERNAL SHELL.

(i) *Bivalves*.—The fresh water mussel. (Fig. 22). This is a soft bodied animal lying between two concave shells or 'valves' as they are called. Such a mollusc is said to be a bi-valve. The two valves are hinged together along one edge; the other edges gape slightly in the living condition when the animal is undisturbed. Protruding through the gape is a white muscular organ with a keel-like edge which can dig into the ground. This is the *foot*. When the animal is terrified, it withdraws the foot between the shells and closes them up with the help of two powerful bands of muscle going across from shell to shell.

The shells are manufactured by two side flaps of the animal called the mantle-folds. Each shell consists of (i) an outer dark green chitinous layer, (ii) a middle layer (chiefly calcareous, called the prismatic layer, and (iii) an inner shining layer composed of a calcareous substance called 'nacre' or 'Mother-o'-pearl.'

Just inside the shells are the mouths. Between these two is the animal proper (Fig. 23). In the normal condition the front end, bearing the mouth-opening immediately above the foot, lies half-buried in the sand, while the hind end carrying the gills (or breathing baskets) is turned up into the water. At the hinder end the

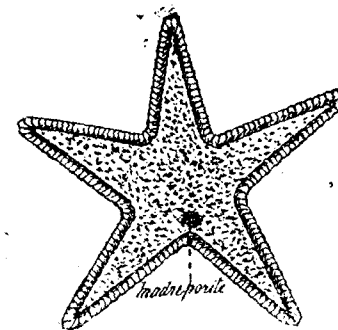


Fig. 16.

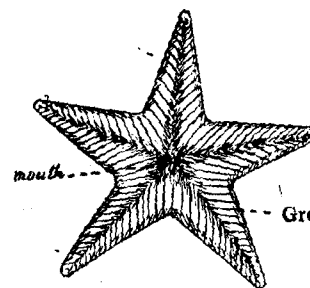


Fig. 17.

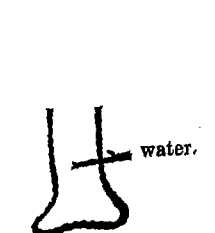
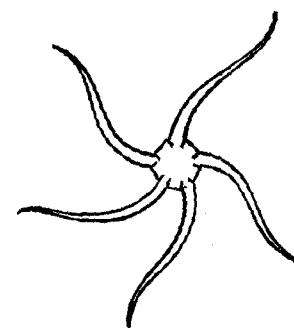
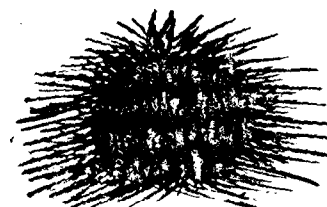
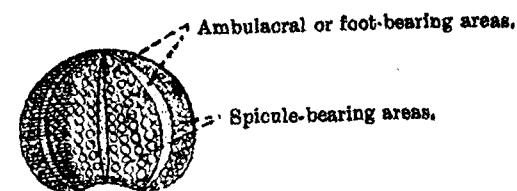
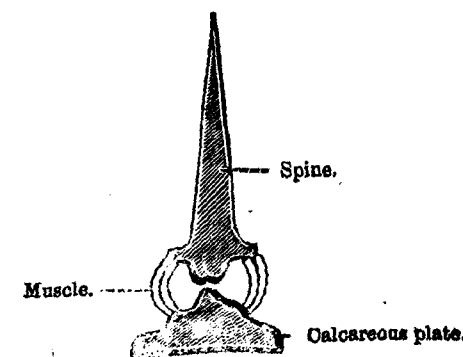
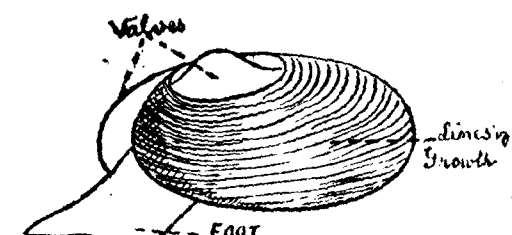


Fig. 18.

Brittle star.
Fig. 19.Sea-urchin
(entire).
Fig. 20.Sea-urchin
(stripped of the spicules).
Fig. 21.

Vertical section of a spine and its joint to show the ball and socket articulation.

Fig. 21 (a).



Fresh water mussel.

Fig. 22.



Diagrammatic section of the front end of a mussel to show the relative position of the various parts.

Fig. 23.

mantle-folds lining the valves, approach each other so as to form a double aperture something like 8. The living cells inside have little processes by the motion of which a current of water constantly goes in through one of these apertures, carrying food to the mouth and oxygen to the gills; while the outgoing current carrying off waste products, passes through the other aperture.

It should here be mentioned that in all truly aquatic animals, the oxygen which they take in during breathing is *not* the oxygen which forms a chemical ingredient of water, but extra oxygen which is dissolved in water. This can be proved by the fact that aquatic animals die when put into distilled water because this dissolved oxygen necessary for their breathing is absent.

Oyster. This is an edible bi-valve. The lower shell is flat whereas the upper is a bit conical. One variety of oyster, the pearl oyster, yields pearls. Pearls are formed thus:

The inner most layer of the shell consists, as has been mentioned already, of the substance, *nacre*. Just inside the shell is the soft mantle. Whenever a parasite, or even a foreign particle like a sand grain, gets in between the shell and the mantle, the animal, to get over the irritation, secretes nacre all over the foreign body. Layer after layer formed thus gives rise to what are called pearls. Pearls are *not* formed as our poets imagine by rain drops falling into the shells.

Scallop (Pecten). (Fig. 24). The only feature about this animal worth noting is its peculiar motion. The shells are repeatedly snapped together. The water in between is squirted out, and the animal propelled in the opposite direction. Look at the straight top of the shell to strengthen the hinge.

Ship-worm (Teredo). (Fig. 25). This bores into wood. If you examine pieces of drift wood you can see them drilled through and through

by this worm. In olden days, *i.e.*, before the hulls of ships were coated with metal sheets, this worm did great damage to the timber. Hence the name.

We have to particularly note the change of form consequent upon the peculiar habits of life of this animal. The front end is at the base of the burrow, and lodges the body proper. The shells are extremely reduced, for the animal does not need them for protection. The hinder end of the mantles form two tubes, the 'siphons' as they are called, opening outside at the mouth of the burrow and carrying the in-coming and out-going currents of water respectively.

(ii) *Gastropods.* We have now done with one type of molluscs, the bi-valves. Let us consider the second common type in which there is a single shell, usually twisted. They are called *gastro-pods*, *i.e.*, those that have the belly for the foot, or in other words, those that creep on their bellies.

Land-mail. The shell is twisted and forms a cone of varying height. The greater part of the body is outside the shell, the flat base of this mass being the foot. At the front end is the mouth. A little above the mouth are four projections. They all function as feelers—one pair has eyes at the tips. This animal is an air-breather. The breathing organ is a sac called the bronchial chamber.

Slug. This is a near ally of the land-snail and also inhabits damp places and is an air breather. The peculiarity about this is that the shell is reduced to a small plate just under the skin.

Fresh-water snail. (Fig. 26). This is a water breather. The shell is generally big, and the whole animal generally withdraws, into it when terrified, closing up the opening by means of a tight-fitting lid, the *operculum*, which also grows with the shell. In one common variety, the Ram's-horn snail (*Planorbis*) the twist of the shell is all in one plane.

Marine gastropods. Here the shells show an endless variety of form and colouration. Let us mention a few.

Limpet (Pattella). Here the shell is conical. The oval foot is a big sucker with which the animal fixes itself to rocks and other hard objects under the sea. When undisturbed there is an interval between the shell and the rock. But when disturbed the shell is brought down and made to adhere tightly to the support, so that the animal can be got at only with difficulty.

Cowries. If you look at a cowrie you would never believe it to be a twisted shell. But if you take a section across it you can see the spiral arrangement inside.

Cowries have long been used as money. Some varieties of them are used in Indian homes much like dice for playing certain games.

Olive shells. These are elongated shells. They have highly polished surfaces, sometimes beautifully coloured. They are generally made into buttons.

Triton. This is a marine gastropod. The operculum or lid of this shell is used in Indian games much like cowries. It is called in the southern districts Ravana's eye. One side is convex. This is white or greyish white. The other side is either plane or slightly concave and is brown coloured. On this side you can see a spiral line. This marks the gradual growth of the operculum to adjust itself to the opening of the shell, which, with growth, gets larger and larger. A big sized operculum may be nearly 3 inches across. The shell is named after Triton, son and trumpeter of the sea-god Neptune.

B. MOLLUSCS WITH AN INTERNAL SHELL.

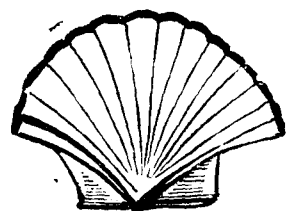
(iii) *Cephalopods.* The last group of molluscs we have to consider is the *Cephalopods*. The name means animals bearing feet on the head. The feet (or rather) arms bear numerous small suckers so that they can take a very tight grip of the prey. Let us now study a few types.

Cuttle-fish (Sepia). (Fig. 27). You would have seen along the sea beach flat calcareous pieces of varying length, hard on one side, but soft on the other. There is a spike at one end. They are commonly believed to be the hardened foam of the sea. In the Northern Circars they are believed to be the excreta of sharks. Such a piece is called cuttlebone. It is the back skeleton of the cuttle-fish or sepia. The name is a bit misleading, because the thing is not at all composed of bone, such as is found in our bodies, but is made up of calcium carbonate. The soft side wears away easily when rubbed. Cuttle bones are hence commonly used by coach-builders for rubbing out old paint or cleaning wood before it is painted.

The body of the cuttle-fish consists of a head and the body proper. The head bears two prominent eyes. And a ring of eight short arms around the mouth opening. These arms are lined on the inside with numerous suckers. In addition to these there are two long arms bearing suckers only at the ends. These are retractile and are usually lodged in a couple of sacks in the head.

The body proper is roughly conical. Underneath the skin of the back is the cuttle-bone. Fig. 27(a). Below it are the digestive and other organs, and a peculiar sack, the ink-gland which manufactures a dark fluid called after the animal *sepia*. The pigment *sepia* used in painting is taken from this. The 'ink' of sepia was used for writing in ancient days by the Romans. The ink sack opens into a cavity below. This cavity communicates with the exterior by two openings. One represented by the big dotted ring serves for taking in sea water. (Note the arrows indicating the in-coming current). This water is then squirted out through a narrow funnel with great force. This squirting propels the animal in the opposite direction, so that the sepia moves, really, head hindmost.

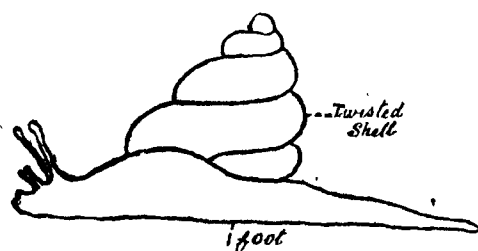
When the sepia is hard pressed by enemies it squirts out, along with the sea water a lot of



Scallop.
Fig. 24.



A piece of drift wood in section showing ship-worm.
Fig. 25.



Snail.
Fig. 26.

'ink.' A dark cloud is then formed, under cover of which the animal escapes.

At school or college if a boy is weak in spelling, he sometimes drops a blot of ink in his answer papers to cover up the defect. Such a pupil can well be compared to the sepia because he tries to escape detection under a mass of ink.

Squid (Loligo). This animal is much like sepia, only it has a pair of triangular flaps on either side of the back. The skeletal support, called the *pen* of *Loligo*, is chitinous, and not calcareous as in sepia.

Octopus. Has eight powerful arms provided with suckers—its tenacious grip is proverbial.

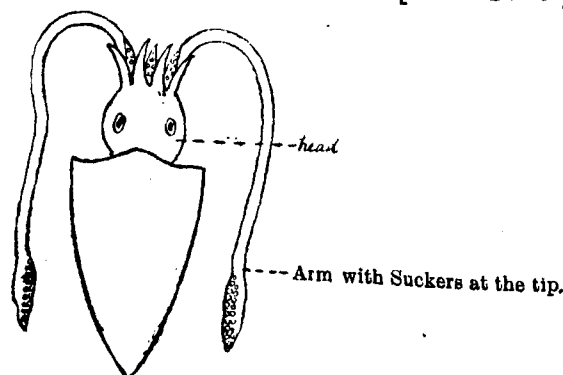
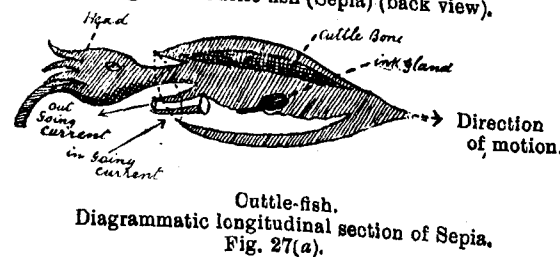
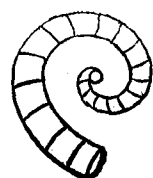


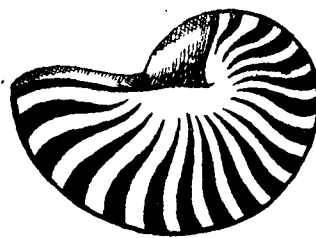
Fig. 27. Cuttle fish (*Sepia*) (back view).



Diagrammatic longitudinal section of *Sepia*.
Fig. 27(a).



Shell of *Spirula*.
Fig. 28.



Shell of Pearly nautilus.
Fig. 29.

Spirula. (Fig. 28.) The animal entire is difficult to secure, but its shell can be easily picked up along the coast of our Presidency. It consists of a succession of chambers and is spiral, but the rounds of the spiral do not touch one another.

Pearly-nautilus (Fig. 29.) The shell of this is easily procurable in shops selling fancy articles. Unlike *Spirula*, only the outermost round of the spiral is seen outside, the rest being internal. There are beautiful orange bands on the outside of the shell. This shell also consists of a succession of chambers. There is a tube running through all. The outermost and biggest chamber lodges the animal in the living condition. The cavity of it is beautifully pearly and shining.

Summary: Molluscs or shelled animals:—

(i) *Bi-valves*—The fresh-water mussel—oyster, pearl formation—scallop—ship-worm—(ii) *Gastropods*—Land snail—slug—fresh-water snail—limpet—cowrie—olive shell—Triton—(iii) *Cephalopods*—*Sepia*, ink gland—*Loligo*—*Octopus*—*Spirula*—Pearly-nautilus.

To the teacher:—Molluscan shells can be collected and preserved dry in a glass case. The fresh water forms should be kept living in an aquarium.

Bi-valves. Fresh-water mussel (to be kept living in an aquarium)—Pearl oyster. Teachers in or about Madras would do well to take the boys to the Museum and show them a little pearly belly-god image, to prove how pearls are formed—Ship-worm, collect a fine specimen of drift-wood to demonstrate the ravages of this worm.

Gastropods. Exhibit fresh-water forms in an aquarium. Comment on the proverbially slow progression of the snail and slug. Take the children on a visit to the nearest sea-beach and let them collect as many different kinds of shells as they can. Keep also one or two cowries cut across.

Cephalopods. Keep specimens of cuttle-bone and the pen of *Loligo* dry in a case. Also keep a sepia and a loligo bottled. It is also desirable to keep bottled another specimen of sepia, dissected to show the ink gland. This may be bottled in formalin. Obtain and hang in the museum a good picture of an *Octopus* attacking a diver.

Spirula and Nautilus. The shells will suffice, *Spirula* shells are very delicate. It is better to keep them therefor in chip-boxes on a bed of cotton-wool. Nautilus shells may be got in the evening bazaar (Moore Market), or at one or two booths at the Agri-Horticultural Society's Flower Show. Merchants and others returning from Mauritius, Penang, &c., some times bring these as fancy articles. If you have two shells cut one longitudinally with a good bow-saw, to demonstrate the chambers.

B. PATTABHI RAMAIA.

THE RECENT RULES FOR ADMISSION INTO OUR COLLEGES.

THE recommendations of the Special Committee appointed to investigate into the causes of the abnormal failures in the last Intermediate examinations and to suggest remedies for the evils underlying the same ended at last in the recent rules for admission into the portals of our University. At first sight our University appears charitable enough in its endeavour to appease the anxiety of the public by presenting them half a dozen alternatives in its rules for admission into our colleges; but a careful eye does not fail to perceive in the rules the rigour of its uncompromising attitude towards the student population. There appear two alternatives in the main; one based on the Presidency averages and the other on the fixed minima.

The rules based on the Presidency averages lay down that unless a candidate's marks in the public examination or his marks after moderation be 5 above the Presidency average in English and in one of the C group subjects (such subject being Algebra and Geometry, Physics, Chemistry or History of England) and unless his marks in the remaining subjects under groups A and C be not less than the respective Presidency averages, he shall not be declared eligible for collegiate instruction; those based on the fixed minima lay down that unless a candidate's marks be 40 % in English and in the principal subject under group C and 35 % in the remaining subjects he shall not be included in the list of the eligibles. There are of course some alternatives with regard to the secondary subjects under the groups A and C, any defect in these subjects being made up by

twice the deficient marks in the remaining subjects under the same groups.

In spite of these apparent alternatives the rules are more stringent than those of the last year. Tested under these rules, many of the candidates declared eligible last year would be found ineligible now. Pitiable indeed is the sight of our University struggling hard to arrive at some workable and simple rules for admission into our colleges. The fact that we are now in a transitional stage in the history of our education explains the chaos into which our University is drifting itself. We are certain there must be found a solid rock on which to stand, somewhere in the near future. But this hope does not prevent us from carefully examining the present state of affairs.

Our University seems to be satisfied that its recent rules promise to root out the very evils underlying the miserable failures in the last Intermediate examination, and to lounge therefore in a happy nap, indulging in fond hopes that there is nothing more to disturb its peaceful slumber. Unfortunately there are other factors, equally important if not more, which go a great deal in bringing down the percentage of passes in the Intermediate examinations. It cannot be gained that the strength of the colleges has abnormally increased after the advent of the S.S.L.C. system. But there are very few colleges which have attempted to strengthen their staff correspondingly. The result is therefore that a single individual is entrusted with the work of a class of two to three hundred pupils. Consequently the Professor or the tutor as the case may be cannot be expected to pay individual attention to the pupils under his charge. It is not an exaggeration to say that most of these members of the staff of a college do not care to identify their own students. Young men coming out of the S.S.L.C. course are not expected to have so high an ideal like the high sounding "Self-help" that, the very moment they get into the Junior Intermediate class, they can easily dispense with any sort of assistance from their superiors. The unfortunate consequence is therefore that they are left to drift themselves into whichever current they come across. Thus after a culpable waste of 2 years of their precious time and money they have to face the Intermediate examination in all its naked reality. Added to this there is a second danger. Most of their Examiners and Assistant Examiners are persons with no experience of a student-life excepting perhaps their own, some decades back.

Under these circumstances the mere rules for admission cannot remedy the evils that have unfortunately crept into our University.

The first remedy we should like to suggest is that the University should insist on the colleges creating facilities for individual attention in the case of the students under instruction. This can only be done when the strength of a class is fixed at not more than 75—a good number corresponding to the 40 of the Secondary Schools. In other words there must be one tutor for every 75 students in a subject. The number of additional Assistant Professors and Professors, may be made to depend upon the number of tutors. This the University can do in the name of "efficiency." The next remedy is to see that no one unconnected with the staff of any college be appointed as the Chief or the Assistant Examiner in any subject whatsoever, since such gentlemen generally have no idea

CORPORAL PUNISHMENT IN SCHOOLS.

of the requirements of the students, as much as a Professor has.

If these two conditions are strictly satisfied there will then be no necessity for the stringent rules for admission into the colleges. The simple rules we should like to suggest are those that lay down that any candidate getting not less than the Presidency average in English and in the principal subject under group C (when the averages are less than 40 %) or getting not less than 40 % in these subjects (when the averages are higher) shall be declared eligible for admission into the colleges, the deficiency in the other subject or subjects being made up by an equal number of marks in the remaining subject or subjects under the same group. Here again the spirit of the S.S.L.C. system must not be lost sight of. The supplementary students need not be compelled to sit for the examination in all the subjects, irrespective of their performance in such subjects in the previous year.* If some suggestions like these find their way into the heads of our men at the head of affairs, we are certain there can be no room for any complaint against the actions of our University.

K. KRISHNAMACHARYA.

[* Since writing this, we hear that the University has made some change in its rules almost amounting to what we have suggested here.]

CLOUD MESSENGER.

A Critical Appreciation of Kalidasa's *Meghaduta*
By RAO BAHADUR M. RANGACHARYA, M.A.
late Professor, Presidency College, Madras.

Price Annas Ten. Postage, etc., extra.

Srinivasa Varadachari & Co., Triplicane, Madras.

IT will be citing a truism to say that anything done to a man consistent with his nature is congenial to his well being and progress, while that going counter to it pulls him aside and retards his onward march. Nevertheless, it is the significance of this plain but important dictum that is seldom practised in its true spirit, nay grasped. Though this should be the guiding principle of every man in all his vocations in life, yet in none other is the blunder in this respect so much productive of serious consequences as in the profession of a teacher who has to deal with the juveniles. For, a teacher can make or mar the tender sapling according to the attitude he takes towards it. In his hand lies the future destiny of the child. Hence he will be culpable of the grossest crime, if he should shirk attention to this aspect of his responsibility.

The temperament of the child being moulded by the various influences, of the home, street and other environments operating on it, he cannot be too careful in analysing its aptitudes and motives before he thinks of improving it. Oft, a stray innocent act, an outward manifestation of the exuberance of animal spirits within, may carelessly be taken to be intentional and dealt with accordingly. And in the tender impressionable age, no trait of character however strong should be taken to be beyond easy correction. For, the child has in it all that is required for the building up of the future man, who is destined, in fulness of time, to approximate to God in every way. And God is Harmony and Love. Hence the child is not an inert being that cannot respond to love. Sna

then being the possibilities of the future man, is it wise to administer to him strong doses of bitter pills for a supposed malady that exists only in the brain of the tutorial doctor? Instances are not wanting in schools where the teacher takes to physical chastisement even for the pettiest offences, nay, indiscretions, due solely to boyishness or to want of a clear understanding of the right. This is to be attributed to the intellectual jaundice of the teacher, who cannot see things as they are. And it is a thousand pities, that even in these days, when there is so much stir in the country for improving the methods of education there are teachers who yet hold the view that the merit of a teacher is proportionate to the terror he strikes in the minds of those entrusted to him. He is a Machiavellian, who not being alive to his own weaknesses and faults arrogates to himself the power of punishing the innocent ones for supposed faults. And nothing is so monstrous as damping the spirits of such innocents with fear, stifling their sense of justice and stirring up their conscience to rebel against such (poor) disciplinary measures. Frailty is frailty with every one. It has no license for anybody. It will be worth while for any one in the profession to think first of all how he liked to be treated by his master when he was young and then acquit himself accordingly. It is nothing short of foolishness that a teacher should resort to corporal punishment in the case of a child which cannot cope with its intellectual work, unaidedly. Nor is it anything else in the case of another who chastises a child for a crime which it cannot understand in its tender age. It is not our plea that crime is excusable under any circumstances. Far from it. But generally any tendency to commit crime can be

checked in its infant stage by bringing home to the child's mind by way of appealing to its higher instincts so as to convince it, the evils arising therefrom in an intelligent and tactful manner. Of course, this is no easy matter and it will tax much the patience and resources of the teacher. But these are exactly what a teacher ought to have whose function is so ennobling and sacred.

Man is an animal gifted with reason and responds most only if acted on through that channel. In him the body is subservient to the spirit within, and does simply what it is instructed to do. It is the mind that is the root cause of all his activities good or bad. Thus the body then having no independent entity in human activity, no operation on it however powerful can be so effective as that which appeals to the mind. This being the relation of the body and the inner man the futility of corporal punishment as an easy method of reforming the child will be patent without further explanation.

"He who checks a child with terror
Stops its play and stills its song,
Not alone commits an error,
But a grievous moral wrong."

For, we are not justified in supposing that the moral standard of children can be high and that any mistake which they may commit should be treated as a crime. Nor would it be reasonable to construe any forgetfulness or negligence of duty on their part to have been the result of personal spite. Boys are boys anyhow. And it is not out of their nature to be forgetful or negligent or mischievous. A successful teacher ought to see behind the wrong, the motive or motives which prompted them to do it. Where there

is a difficulty to understand the motives, a charitable construction should be put upon them, and kindness and sympathy must set the wrong right rather than severity. A good remedy will be to make our own teaching interesting and to make the attention of boys to the lessons voluntary and not forced; for, it will be found highly useful that the boys themselves regret their want of attention and never pretend an obedience which they cannot give willingly for the cane.

In fine to deal successfully with children and be useful to them, the teacher should be the master of himself before he can think of being a master to them. In fact he should have a mother's heart, a doctor's patience, a judge's insight and a statesman's intellect.

T. S. SUNDARAM AIYAR.

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XXIII

AN INQUIRY INTO THE RESULTS OF THE PRESENT SYSTEM OF GENERAL EDUCATION IN INDIA—HOW THE INDIAN GRADUATE IS HANDICAPPED.

WHAT is required in this country at the present day as regards education is not so much the springing up of new schools for girls and for depressed classes, and new Universities on the existing bad lines as a thorough examination of the system itself and a careful reform of it so as to enable it to fulfil its real object. No doubt the present extent of education is poor as can be inferred from the following figures:—

	1911 (Census) population.	No. of Pupils.	Percentage.
Bombay	19672642	922877	4.6
Burma	12115217	445255	3.6
Madras	41405404	128065	3.09
Assam, Bengal, Bihar and Orissa }	86687394	2684484	3.08
Central Provinces	13913308	313205	2.2
United Provinces	47182084	712000	1.5
N.-W. Frontier Prov.	2196933	34911	1.5

The average is about 3%, and about 70% are still directly living by agriculture in villages. Unless there is an increase in the number of educated women, Primary Education cannot become compulsory as they alone are best fitted to popularise it. In spite of this little progress, there is already a feeling of discontent among Indians of position (who received their English education in its early stages and whose struggle for life was not therefore so keen as at present) as a result of the kind of education that has been in existence here for the past half a century, that the services and the learned professions are already over-crowded, i.e., the supply exceeds the demand. The ancient Universities of Oxford and Cambridge, established as they were about

800 years ago, are still sending out such graduates as are in demand everywhere on account of their superiority. The condition in India is due to the unequal distribution of educated men in the professions. True it is that the Law and the Government services are overcrowded but there are a number of places requiring scientific knowledge, not held by many Indians and held mostly by Europeans such as Astronomical and Meteorological work, Trigonometrical, Botanical, Geological and Economic Survey work, Veterinary, Forest, Agricultural and Sanitary work, Fisheries and Marine work, Art, Architectural, Epigraphical and Archaeological work. If a large number of schoolmen who cannot be successful in the literary line, get trained in school workshops or workmen's schools organised by public benefactions on accurate scientific methods combining with it their own hereditary talent, at least, in the humbler industrial departments of the miner, the smith, the carpenter, the builder, the jeweller, the dyer, the shoemaker, the baker, the weaver and the cook which require no great engineering knowledge except perhaps a little of mechanical training which is essential for ordinary life, and replace unskilled workmen, matters will be considerably improved. Even the Royal children are taken through such a course. It is only this kind of work, that would enable us to utilise the unexplored mineral resources of India and thereby make this country an economically prosperous one. Otherwise there is an enormous waste of energy by way of failed men without being employed in a commercially useful manner. The old apprenticeship system has crumbled into pieces by the disintegration of village life owing to the present peaceful conditions and no industrial system on modern lines has taken its place. Unless the country is materially enriched and there is a consequent increase in the standard of life, the demand for higher salaries cannot receive any adequate attention.

But even this little extent of education is not of

such a satisfactory nature as to attract the illiterate and make them envy the recipients of that education. The real object of education is (1) not giving some knowledge but the development of mental faculties and training the capacity for acquiring knowledge and of pursuing systematic research and (2) softening manners and wearing away uncouthness and refining the pleasures of life. In India it is pursued as a means of earning livelihood and equipping the Government offices and clerical posts with suitable men. But otherwise it is a failure because it has not taught them anything more than the mechanical arts of reading and writing and as Mr. Yusuf Ali, I. C. S., remarks (an Indian Matriculate "is actually inferior to the boy he was when with his morning face he crept unwillingly to school. He then had the freshness, spirit and energy. His outlook on life was healthy and bright. These precious possessions he has bartered away for a few ill-digested facts and fancies which make him unlovely in the sight of friends and enemies.")*

Indian courses compared with English courses are not high. They look formidable only on paper. Thus

† 15 years' course London Matric. (age 18-19)
—Our B.A. (Junior)

* Life and Labour of the people of India.

† In Cambridge both B.A. (Pass) and B.A. (Hon.) can take the M.A. degree after sometime. In Calcutta and London the B.A. (Pass), the B.A. (Hon.) and M.A. examination are distinct. In London, the Intermediate (Hon.) is more difficult than B.A. (Pass). In Madras B.A. (Pass) is distinct from B.A. (Hon.) who alone can become an M.A. The examination standards of Cambridge and London are high but the failures are few. In Edinburgh there is no B.A. and M.A. (Pass) is like our B.A. and M.A. (Hon.) is like our B.A. (Hon.) but the examinations are held in every term and the students can complete their courses by means of the compartmental system. The Bar examinations in England which are required for mere practice are easy but these are different from the University examinations in Law which are not necessary for practice. U.S.A. degrees except those of a few in the North—are not genuine. So a mere degree does not give us an idea of a man's merits. After all one should not tire oneself with examinations but conserve for the future capacity for research.

15 years' course in
spite of the foreign
language difficulty
Cambridge B.A. (Pass).....less than
our B.A. (Pass)
3.A. (Hon.) Part I =...
..... less than our B.A.
(Pass) or Bombay B. A.
(Degree Exmu.) " B.A. (Hon. Part II,
Lond B.Sc. (Hon.)
=our B.A. (Hon.), M.A.,
M.Sc. (Calcutta.)

But even when the courses are similar, the Indian cannot compete favourably with the Englishman. The English student has the benefit of good teachers and Correspondence Colleges. That is why unless the Indian receives this special coaching for I. C. S., he cannot succeed, however bright he might be. English Medical education in India is fairly all right unlike the Arts education. On account of this inferiority of general education, our men are not valued even in our country while the services of Europeans are required in all civilised countries. Except one or two Indians no Indian could give his service elsewhere than in India.

Our system breaks down because it is applied to ill-equipped minds. It is not everybody that should enter upon literary courses. From the 4th Form onwards, a student has generally to pay Rs. 5-4-0 per month and unless his guardian be a middle-class man and has a monthly income of about Rs. 100, he cannot find it easy to spare that amount (*vide Mrs. Brander's Indian Domestic Economy*). These school fees are not proportionately high when we find that they are required to maintain the efficiency of the institutions in modern times and that in England it costs Rs. 150 (including boarding) for a pupil at the Preparatory school, and as the cost of education in England therefore is high, every father does not educate his child after a certain stage. In spite of such school fees, without considering whether every pupil should receive literary education, we enter upon this wasteful and uneconomical procedure.

Middle class education should be different from that of the working classes or of women or of nobles. Of course provision must be made from the benefactions of the general public for an exceptionally bright student of the poorer classes to receive University education also. Now-a-days the classes have grown very unwieldy, discontented law students (when the most learned men should) take up the teaching work and schools are run for profit on commercial lines. There must be sacredness and interest in the work. For instance even now Dr. Sir Gurudas recreates himself by teaching Mathematics to the students of a high school in his neighbourhood once a week. On account of our depressing conditions, the quality of the teaching has gone down and the failures at our Matric. and Inter. examinations are 75% and 80%, its effect on the students being only to create despair in them.

If the students are removed from the disturbing conditions of their home and placed in residential institutions and entirely educational environment where individual attention is paid to boys there will be less number of failures. These must be attached to public and private schools. That is why in English Universities the failures are so few. I do not mean thereby that private tuition is necessary. It is waste of time for attentive students but individual attention regulates hours of study and gradually trains them up. The inefficiency of teaching also accounts for the long time spent on Indian Secondary education. The authorities should take the lives of the students completely under their charge. Any half-hearted system like our hostels and boarding houses where only food (not even common table on account of caste distinctions) and shelter is given but where there is no discipline as to hours and occupations will not work. Formation of the student's habits and character should be aimed at—where the student goes, what company he keeps and how he uses his leisure. The corporate life develops unity and social habits. The institution should partake of the nature of the home and the club.

The following are the intellectual results of English education in India* :—

(1) *There is no judgment or observation on the part of the student who regards education as something alien to his life. There is no spirit of study for its own sake. Whether an Indian student is originally incapable of original thinking or not, in the present system there is no scope for originality and research as is evident from the case of Mr. Ramanujam. Tata's Research Institute even though it has become an industrial research institute has not been popular and is a failure. As Dr. Simonsen pointed out, if there is a spirit of research at all in India, it is in Bengal, in spite of the easier courses there.† Already 4 or 5 Bengali M.A.'s and M. Sc.'s have passed London D.Sc. in 2 years like London M.A.'s. Mr. Raman, a Madras M.A., works in a Bengal laboratory. In Madras though the students are intelligent and pass very difficult examinations, they have not yet risen above material considerations. Among Indian students, there is only memorising strengthened by hereditary talents, cramming and grinding of unassimilated facts of knowledge. This memorising commencing from the repetition of multiplication tables and formulæ by the child in a sing-song way, stops by about twenty-five. In the 2nd or 3rd year of school life the Indian child knows more of rough and ready arithmetic than boys of a very advanced form in an English school. Under these circumstances, there is no wonder, that mental life stops in India by about just the time when it really commences among Europeans.*

(2) *There is no method, logical sequence or regular arrangement in the answers. There is no intelligent and thorough study of books. Logical sequence and arrangement with the help of books in answering examination papers is better than giving out disjointed facts from memory.*

* Mr. Wood's Lecture on the Mentality of Indian Students.

† Dr. Ganesh Prasad's Lecture on 'Mathematical Research'; Mr. Dutt's Chemical Industrial Research has attracted the attention of U. S. A.

(3) *There is also no accuracy, precision, or clearness.*

It is scarcely that we, like English boys, can take rest and spend time in recreation and entertainment just before the examination. If we be allowed such pleasuring time we forget facts as we have not made them part and parcel of our knowledge.

Take again the Physical results *

The size of the pupil and his chest measurement have largely gone down. Many boys suffer from curvature of the spine, heart and lung troubles. Early marriages are sapping away the energies of some students. The abuse of sexual functions has greatly to do with undue delay over a course. It has also to do with defects of vision that we now often see. The English system of holding classes from 10 A.M.—1 P.M. is not good here. The hot sun exercises an enervating influence. The morning time should be greatly utilised and the hours of work at school require curtailment with a view to give them more time for self-culture. No recess is given between the hours. All Indian vegetarians take far less proteid food than is necessary for mental workers even according to Prof. Chittendon's estimate. Though school-games exist in name, in practice the boys rarely take exercise. Those who study well scarcely take any exercise at all and among others there is a craze for sports. There is no harmonious development of body and mind. Games occupied an important place in the ancient education of the Greeks. Volunteer corps are attached now-a-days to the schools of England, Germany, France, Russia and Japan. They develop powers of self-defence. The school physicians should maintain a record containing weights and results of inspection.

There is another phase of life which is the pride of the public schools of England but which is entirely lacking in this country. They consider that a person has not received the full

* Lt.-Col. Datta, I. M. S.,—"Vitality among the Educated Indians,"

benefit of education if he has not simultaneously developed his character by being allowed to lead well-organised residential life and take active part in games. There are also other factors at work such as manual training and co-education with girls. It is a hard discipline, and sturdy character is developed by mutual concessions in society and is helpful in developing heart, courage, strength and bodily skill. From that point of view we can scarcely call our system education especially when the mental results also are unsatisfactory. Character does not so much mean as is generally supposed domestic virtues but those qualities which go to make just and public men. Of course personal virtues, like honesty, truthfulness, earnestness, perseverance and hard work are indispensable but what are of greater importance are qualities of self-help and self-reliance. They are mental and physical qualities which help a man to succeed in society better than one who seeks the artificial aid of property, position and an educational degree. Unless we develop character, we cannot be entrusted with any responsible duty which affects the interests of multitudes. No attempt is made to give such training in our schools. Many of our organisations fail for want of it.

What are the qualities that go to make a gentleman *

(1) Culture—a fair knowledge of all the important branches of knowledge is requisite for a balanced judgment. A cultured man introduces taste, grace and elegance in his home. It fosters a width of view and makes him consider questions from a broad standpoint in proportion to its worth in the world at large.

Common-sense—a really uncommon product. It makes one curious to learn new facts. There are scarcely any among us who keep the habit of daily reading after emerging from the college.

(2) Decision—which enables one to carry out into practice what one believes to be right without yielding to the opinion of others unless such a procedure be for the good of all. We have not

been able to carry out social reform for want of decision of character.

(3) Practicality—which enables one to be useful to national life. Mere idealising away, dreaming and theorizing like the ancient Greeks must yield to practicality through which the ancient Romans and in modern times the English succeeded. It is only by industrial and commercial development that a nation becomes prosperous.

(4) Social service, sympathy, sacrifice and self-denial—we must sink our individuality for the common good. It is the duty of those whom Providence has placed on a better level to labour for those who are inferior to them such as educating the ignorant and helping the blind, the deaf and the dumb, the maimed and the infirm. We should do some practical service to our fellow-men. The nurses do excellent social work in the hospitals.

(5) Chivalry in home life—The beneficial influence of woman on man imparts the finer graces and harmony in life which gives some amount of humour.

(6) Unity, loyalty and love of country—The English are thoroughly loyal to their sovereign and do everything in their power to help the progress of their country in all practical ways. Unity is developed in a corporate life and leads to nationality. The want of it is of advantage to the enemy. In Bengal a little of unity exists though by no means a perfect one—boys will be boys—as is evident from its art and literature.

(7) Noble ideals, hobbies and recreations help to prolong life. Live by creating an atmosphere of laughter either at indoor games or dinners.

(8) Simplicity, self-control and healthy ambition. Life should be simple and one should not yield to the temptations and lusts of the flesh. He should always be fired by an ambition to achieve something great for his country. Wealth should not be despised; only money for its own sake should not be loved because it is apt to become a craving.

(9) Self-reliance, system, order, straightness and uprightness, and organisation are acquired

* Mr. Stratharn's 'Lecture on Education in India.'

in a residential life. One cannot get on in life unless he peacefully proceeds in a systematic manner with a definite programme before him. Vanity, self-importance, brooding over personal wrongs and grievances are not allowed. One should not trumpet himself, on the other hand he should be modest enough to be silent about himself, neither should one make much of a matter which affects himself alone.

(10) Cheerfulness, imperturbability, governance of temper, manly spirit, social freedom, equality, self-respect and assertiveness (not aggressiveness or shyness) are developed by sports. The mentally and physically fittest thrive now among multitudes and there is no room for a shy man. Personality and worth help a man in pushing him to the front. We must distinguish between social and official spheres. In official work each man must faithfully discharge the duty assigned to him but there must be equality in social life. After Parliamentary fights the Liberal and Conservative members sink all their political differences and move as if they are one. They do not lose temper and make each other enemies for ever. When necessity requires you may level sarcasm or irony at your opponent but all the same you must be friends. Sports make us take victory without boast and defeat without depression and train the eye for critical situations. They also make men capable of command and ready to obey. Bullying, insubordination, disobedience and impertinence are on no account tolerated. We know all these are wholesome but we rarely own them. Unless we acquire these characteristics it is as good to say that we are not perfectly convinced of their moral worth and the object of education is defeated as it stops only with saying. They require training and not teaching as in the case of manual work. These are qualities brought into play only in society and lead a man to success materially. A man may be quite moral even without these; personally they are not of much value. But man exists for society and is only a social animal. These qualities are essential for his success in life.

The following suggestions besides those men-

tioned above are made for the reformation of these evils :—

(1) There must be greater sympathy between the master and the pupil. The master is now an official red-tape. The old Guru if he were alive would be ashamed of his modern representative.

(2) The quality of the Professors should be improved. The best European Professor cannot be induced to come here even with huge salaries because there are no opportunities for study. Europe enjoys the advantage of excellent instruction. There the most learned men of the world make up the teaching profession leaving the more practical ones to the less learned. Even the Preparatory schools are equipped with Honours graduates on modest salaries. But here the teaching is not of the highest order because the educational officers are inferior to those who come here as civil servants. The I. C. S.'s though they sometimes do not possess a degree are as good as the best Honours men of Cambridge or Oxford but they are by no means to be reckoned as learned professors. Much less are our educational officers, sometimes I. C. S. (failed) who are actuated in coming here not by the generous spirit of spreading knowledge to the ignorant but by the motive of service and practicality. They are not the best men of their land. For these "skilled crammers" we have to pay as much as England pays to her wisest men because it is not possible to attract young Honours students of Oxford and Cambridge with less. Even Missionaries require little less than what ordinary Englishmen demand for salary in the Educational Department. Our education is therefore as it were imparted by students and hence "the shadow of a shadow." They are scarcely able to set original questions, often borrowing from the Oxford, Cambridge and London University calendars and text-books. Good examiners do the other way about and supply the text-books with questions. Stinting to pay liberally to professors affects the efficiency of lectures. While the University of Calcutta tries to secure periodically the services of some of the best men like Schuster, Vinogo-

druff, Jacobi, Walker and Forsyth, the University of Madras arranges lectures on Phonetics by Jones, Cities in Evolution by Professor Geddes, Sanskrit by Dr. Collins and Geographical Factors in History by Dr. Rawlinson and was about to arrange a course of lectures on Comparative Philology by the Zoroastrian Professor the late Dr. Moulton—lectures which are quite outside the sphere of University courses, necessary at present here—but feels unable to engage the services of the Indian, who has achieved international fame in the world of Science, Dr. J. C. Bose. The Indian teacher on his part should take a pride in his profession. Now he is wanting in status and position. The teacherships should not be merged in "services." They should not bother themselves with anything outside their sphere while they are in duty, lest their attention should not be wholly undivided. The teachers like Dr. Jewett, Dr. Butler, Arnold, Munshi Ram and Hansraj should be personifications of graciousness. He has to train the immortal spirit. It should not be looked upon as a temporary means of obtaining a livelihood until something more attractive offers. But it is well worthy of being made a life employment. Some of the noblest men have devoted themselves to the profession. A teacher may exercise the most beneficial influence over the character of his pupils. Their gratitude and the good he has been the means of accomplishing will form a rich recompense. The late J. B. Norton says "Perhaps if the balance were fairly struck, the even modest tenor of his life would leave little for him to envy in the temptations, the jealousies, the trials and the struggles of those who in ordinary parlance are spoken of as the most brilliant and successful of his contemporaries" (in Law and Commerce).

The Indian teacher should have for his motto "plain living and high thinking." He should avail himself of every opportunity for self-improvement but as his wants are simple, he can be satisfied with just a little money. A real teacher should rise above the vanities and conventionalities of life. He should not demand equal

salaries with Europeans as it will be an inducement for a luxurious way of life.

Life in England is ten times costlier than life in India and the European's life in India is much more because "it is more expensive to live in India in strict accordance with European style. The European who comes to India naturally desires to enjoy the same things in India that he has been accustomed to in Europe and such things are often expensive. For a homely example, if he has been accustomed to eggs and bacon for breakfast in England he may like to have eggs and bacon for breakfast out here; but though eggs in India are cheap, the tinned bacon that he must buy in India is very much dearer than the humble rasher that he feasted on at home. Similarly if he drank beer in England, he could get a tumbler of the best draught ale for two pence, whereas in India he must get his tumblerful out of a bottle which will cost him at least four or five times as much. It may also be answered that the European in India is by no means, as a rule, so provident as his brother usually is at home. In England, when pay day comes round, the salary earner will very likely be reckoning up his future expenses with a view to calculating how much he can add to his credit at the bank; in India, though he has a larger salary, he will probably be reckoning up his past expenses with a view to calculating how much the bank will add to his debt. The conditions of life in India by no means tends to make the European a provident creature. In all the services, both civil and military as well as in many private departments, there is no necessity to save; for there is a pension to look forward to, for oneself in old age or for one's wife and children; and in cases where there is no pension, Europeans in India are generally benevolent enough to get up a big figure subscription for old Brown's widow and children, if the winding up of the defunct Brown's supposed magnificent business leaves his widow and children penniless. European social life, too, in India is expensive. It is too hot to do much pleasuring in the day-time; so apart from business, life in

India resolves itself into a round of expensive dinners, bridge parties and hours at the Club. People with big salaries give the lead and people with small salaries try to follow suit. The young man whose tastes in England were of the simplest, learns to appreciate a glass of cherry and bitters before dinners and a glass of char- treuse at the end. The young man who in England used to smoke occasional pipefuls of cut tobacco learns in India to smoke unlimited Egyptian cigarettes. The man who in England went down to office in a tram finds it necessary in India to go down in a brougham. The man who in England would have put down his name for a shilling or half a crown as a subscription to parish festivities is ashamed in India to contribute less than Rs. 20-0-0 to station sports. It is the Indian system and he would be a brave and not necessarily an admirable man who would break absolutely through it. It is the same with the Mem Sahib. Indian house-keeping, so far as the actual necessities of life go is absurdly cheap but the round of dinners, entertainments and amusements make it abnormally dear. Many of our European housewives in India belong of course to a class of society in which they would have been accustomed to continual rounds of social entertainments before they come to the country but many do not. In India however a second nature is soon acquired and the clergyman's daughter who in England may have been accustomed to neighbourly tea parties with the sober excitement of a small dinner party when the Bishop came to confirm the children at her father's church soon learns to go with the current when she marries her cousin in India and ere many weeks have passed, she dines and gives dinners as to the Anglo-Indian manner born. European life then in India is an expensive thing."

"The salary of a European in India may be said to be on an average some ten times the present salary of an Indian in a corresponding state of life. The services of an Indian graduate can be readily obtained on an initial salary of Rs. 25-0-0 a month but there are not many

Indian or English graduates of England who would come out to India on less than an initial salary of Rs. 250; if on that! An Indian clerk in a mercantile office is glad to get Rs 15 a month to start with but the imported European 'Assistant' usually gets more than Rs. 150. A salary of Rs. 100 a month is as big a plum amongst Indians in India as a salary of Rs. 1000 amongst imported Europeans."* It all depends on the life one is previously accustomed to. A Muhammadan graduate from the Aligarh College naturally gets a higher salary than any other College graduate. It costs him much to maintain a fair standard of life. It is not fair that Indians should demand equal salaries with Englishmen. There was a former Master of St. John's, Cambridge—a scholar of Humanities who was said to have lived on a fare of 2d. a diem (of course a vegetarian). The Fellows of Colleges in England who are young D. Sc.'s and F. R. S.'s (the highest distinction in Science) live on £200 per annum (excluding housing and boarding = Rs. 250 a month corresponding to Rs. 20 here while we have to pay Rs. 500—1000 to our Educational officers here)—an amount that the Government of India pays to an Indian student for enabling him to prosecute studies at Cambridge. This is after all a modest estimate because such a student very often wins another college scholarship which enables him to get on fairly. Imagine a brilliant Indian graduate being started on a pay equivalent to the amount he spends in his college life. The Fellows (like our Sanyasins who lived on the charities of temples) give themselves up to research. They are too poor and studious to marry. They do not care to like like the practical men in other walks of life but keep on a workingman's fare. They have nothing to do with working out political evolution but only to fulfil the important part of moulding the careers of the young men placed in their charge. Though some distinguished men among them like Sir J. J. Thompson and Sir J. C. Bose are knighted sometimes for their worth, they find it difficult to keep up their titular position. Indian teachers

* Glyn Barlow's Industrial India,

should take Mr. Gandhi's career for their model who has taken a vow of poverty. The Fergusson College, the Theosophical Federation, the Gurukul and the Arya Samaj Institute, the Bolepur School of Sir Ravi Tagore, have been working on this principle. Mr. Gokhale, who was for a long time the Principal of the Fergusson College, formed the Deccan Education Society—an institution based on the order of the Society of Jesus. The Hon. Mr. Paranjpye, Senior Wrangler and Fellow of St. John's, Cambridge, though he was offered an appointment in the I. E. S. and could have come out as an I. C. S. if he had tried, lives on Rs. 75 a month (excluding housing and boarding) in spite of his being its present Principal. The Society makes provision as regards insurance and education of children. The other sources of income of the Fellows are examiner-ships and book writings. They retire after 20 years' service on a nominal pension of Rs. 30 and all must be M.A.'s. Such spirit of self-denial seems to be among the Marathas of the Bombay Presidency. Indian Fellows should be like them, and great teachers should try to emulate them. Their only delight should be in cheerfully teaching the ignorant. They should not feel it monotonous or forced to do that work. Darwin, Huxley, Lubbock and Ruskin have lectured in the workingmen's institutes. If some teachers, on the lines of the English University Extension Scheme, actuated by love for fellowmen, organise during vacations, lectures to the people on scientific and hygienic topics, viz., agriculture (with magic lantern exhibitions), co-operation, geography, a little economics and civics instead of relying on Government who are always embarrassed financially owing to military exigencies, there would be greater spread of knowledge. They would incidentally shape the vernacular into a fit medium of instruction and in course of time economise time and labour spent in acquiring English spelling. Much of this work of reform rests with Indians who have to carry out

in practice all educational work. No school should spring up without also arranging for a residential institution and workshop. Character must be primarily developed for in Indian homes, there is little opportunity to cultivate qualities that would be useful to public life and success in the world. Unless a greater number of Indian teachers work in the selfless manner in which the Swiss teachers apply themselves to education, it cannot be of any real good to the country.

V. V. NARSIMHAM.

UNIVERSITY OF ALLAHABAD.

CIRCULAR No. 3 of 1917, dated 28-4-17.

From

THE REGISTRAR,
UNIVERSITY OF ALLAHABAD

To

THE HEADMASTERS OF RECOGNISED SCHOOLS.

SIRS,

I have the honour to observe that notwithstanding the instructions conveyed in this Office Circular No. 14 of 31st May, 1916, the Headmasters of certain schools sent up candidates for the Matriculation Examination of 1917, taking certain optional subjects in which the schools were not recognised. The Syndicate has noticed the action of the Headmasters with considerable displeasure, and has ruled that in future no candidate appearing from a school with an optional subject or subjects in which the school is not recognised will, in any circumstances, be permitted to appear at the examination.

2. I am, therefore, directed by the Syndicate of the University to warn the Headmasters and Managers of schools against any infringement of the above orders and to add that no school should open classes in a subject or subjects for which recognition has not been previously obtained. Further, that no classes should be opened in anticipation of the sanction of the Syndicate.

PUPILS AND INATTENTION.

IT is not uncommon to come across teachers accusing their pupils of being inattentive to their teaching. When one hears such an accusation, one, if he be of a scientific turn of mind, cannot help questioning himself whether inattention is "native" or "borrowed." Whether it is the deliberate purpose of the pupil to annoy his master by attending to his friend, Mr. Inattention, or whether he is uncharitably reprimanded for things, which are outside his control will be the object of this short paper to find out.

For the sake of brevity and pointedness, let us grant that the teacher believes in, and is a follower of, the "Doctrine of Original Goodness." If so he does not believe in the intention of his pupil to be inattentive to his teaching. He does not blame him and concludes that the inattention of the pupil is not his own seeking, but is due to something else; it is thrust upon the pupil by some outside agency. Arguing, again, from the broad utilitarian standpoint, one can only come to that finding. For why should the pupil pay and then refuse to be taught? A rejoinder might at once come upon us that that viewpoint is out of place in that it expects a certain amount of commercial knowledge, of which they are incapable at that stage. Well, Are they at least inquisitive? Does not an insatiable curiosity characterise childhood? Is not a burning love manifest in children to tell and to be taught? Why should they be inattentive? The answer to every one of these questions will show that *inattention* is not *inherent* in children and as such does not require hot pills from the teacher to cure it.

Our inference now is that *inattention* is "borrowed" and is the work of factors, which are outside the child. What are those factors, which are the authors of the teacher's

abomination—*Inattention*. They, it is believed, emanate from three sources—the class, the teacher and the home. All these three co-ordinate and interact in producing inattention in pupils. So each cannot be spoken of independent of the other two equally important factors. Dwelling on the first, namely, the class, we should say that insufficient accommodation and neglect of healthy sanitary conditions, such as, ample ventilation, sufficiency of light, easy, suitable, portable furniture, and apparatus and appliances, react upon the young children and consequently make them inattentive. Generally speaking Dr. Lyster and his School Hygiene are more honoured in the breach than in the observance.

Regarding the teacher, it is hardly necessary to state that the one eye-sore in teaching is the difficulty to get down to the level of the pupils, to find out their mental content and then to follow the "line of least resistance." Occasions there are when the crying child is not fed and the sickly one nursed but is asked to pull up with the rest. The rigour of the examinations, the pressure brought to bear upon the teachers by the managers for increase in school revenue on the one hand and the departmental strictures for efficiency on the other and the various other causes, which are outside the scope of this paper, perhaps account for the fact that the same curriculum is prescribed for all pupils of varying capacities and aptitudes. Will the same mental food be inviting to all? Are not the dislikes bound to cause indifference and dissipation of attention? "Monotonous old things and unintelligible new things" bring about *inattention*.

Touching on the home, we have to say that, it has its responsibility and blame proportionate to its contribution towards *inattention*. The question of food, over-feeding, under-

JUNE 1917.]

BOMBAY GOVERNMENT CIRCULAR.

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GOVERNMENT OF BOMBAY.

EDUCATIONAL DEPARTMENT.

Circular No. 1405.

Bombay Castle, 7th June, 1917.

CIRCULAR.

It has recently come to the notice of Government that students from schools and colleges have latterly been attending political meetings in large numbers. Such attendance is contrary to the rules regarding the participation of students in public meetings laid down by Government in connection with the maintenance of discipline in schools and colleges. It is the desire of Government that these rules should be strictly observed at the present time by pupils of all educational institutions, whether Government, aided, or unaided but recognised. The Director of Public Instruction should accordingly be requested to invite the attention of all heads of educational institutions to the following documents containing the rules referred to, which are reprinted as accompaniments to this circular:—

(1) Government Resolution No. 2395, dated the 30th September 1908.

(2) Circular to masters of primary schools in the mofussil printed as an accompaniment to Government Resolution No. 2396, dated the 30th September 1908.

(3) Government Notification No. 1570-A., dated the 4th August 1909, publishing general rules of discipline for Government schools.

2. Government particularly desire that school and college students should not be permitted to attend meetings which are organised by home rule leagues or at which home rule is to be advocated. Proved instances of the breach of the rules or connivance at their breach by the heads or managers of educational institutions will be taken serious notice of by Government.

G. A. THOMAS,

Secretary to Government.

feeding, unwholesome diet and things of the sort, cleanliness, neatness in dress, bathing and cleaning all the organs of the body—especially the eyes and ears—is purely that of parents; offensive smell, disagreeable dress, short-sight, hard hearing and their friends must be scrupulously attended to by the home and supplemented by the school.

How is the school going to supplement the work of the home in keeping the pupils in good health? What are the resources at its disposal? Medical inspection of pupils is the one and only way that is left open for the school.

Physiological psychologists tell us that a sound mind in an unsound body is a myth, that to attend to the teaching at school under physical discomfort is an impossibility and the receptivity of knowledge is enhanced by securing good physical conditions in the school as well as in the pupils.

In conclusion, we say, that inattention is not native in children. It is due to unhealthy school conditions and neglect of parental care at home.

The teaching must proceed only after establishing a thorough and searching medical inspection of pupils in the school from time to time, so that the short-sighted might be provided with spectacles, the defective ear might be duly brought to the notice of the parent that he might see his way to arrest the evil and all the other diseases, which human flesh is heir to, might be cured in time. To get on with our teaching, while allowing to exist these foes to attention, to real good teaching, to the health of children is to neglect one of the most paramount of duties of the school—that of producing educated, healthy, and disciplined citizens of the country, and to set at nought the third important aspect of education—namely, Physical Education.

V. N. RANGASWAMI.

Accompaniments to Government Circular, Educational Department, No. 1405, dated the 7th June, 1917.

Political movements—

Discipline in colleges and schools.

Measures for the protection of pupils from evils resulting from their incursions into political affairs.

Educational Department.

No. 2895.

Bombay Castle

30th September, 1908.

RESOLUTION OF GOVERNMENT.

His Excellency the Governor in Council observes with extreme regret that the advance of education in this Presidency, towards which Government contribute largely from the resources of the Province, has been accompanied by relaxation of discipline and a lowering of the standard of manners in schools and colleges. This has lately culminated in flagrant offences against school rules, while complaints of the rudeness and discourtesy of boys in public are becoming too frequent.

2. His Excellency in Council feels certain that no parents can wish that there should be a breaking up of family life, that authority should be disregarded and that the way to anarchy should thus be prepared. These are the necessary results of any weakening of that discipline which the wisdom of the East has always recognised to be the indispensable preliminary to a right use of the independence of manhood. It is in well-governed families, schools and colleges, and there only, that youths can be trained to the duties and responsibilities of citizenship. There only can they learn the habits of obedience, mutual respect, tolerance, self-control, self-sacrifice and devotion to a common good which are vital to the existence of organised society. Where these lessons have not been learnt, there can exist only a mob of individuals knowing no law but inclination, no good but personal gratification and self-aggrandisement, and unable to rise to a conception of national progress. This is one of the most certain lessons of history, and its truth has never been questioned in India, where it has been powerfully re-inforced by religious sanction.

3. The traditional feeling of boys towards their guru in this country has always been one of respectful awe, and the attitude of children towards their parents and elders has always been one of implicit obedience carried on even into mature age. It must be the fault both of parent and of guru if the reverence accorded to them even a quarter of a century ago is now being lost.

4. His Excellency the Governor in Council is convinced that the growing laxity of discipline and disregard of authority are in some measure due to the tendency on the part of boys and students to associate themselves with political demonstrations. Whatever may be the merits of any political propaganda, there can be no question that the participation in it of youths in the state of pupillage is gravely injurious to the progress of education. Not only are immature minds impressed with ideas before powers of judgment have been acquired, but the mental excitement thus induced is necessarily prejudicial to an orderly process of learning. In the words of Dr. Edward Caird addressed to the students of Balliol College, Oxford: "To undertake such work would be to anticipate life in such a way as to hinder your preparation for it." These words express a universal truth, and the Governor in Council has come to the conclusion that, in the interests of educational progress, which are now plainly suffering, the incursions of boys and students into political affairs must be checked.

5. When boys live in hostels, the responsibility of the parent is for the time suspended, and that of the master is complete. In day-schools, the master is responsible during school hours, and at other times the parent. There must, therefore, be co-operation between master and parent. Nowhere in the past has there prevailed a more attractive type of manners and a higher standard of courtesy than in Indian house-holds. Both masters and parents are well aware of this. They know the sentiments with which they were inspired, and the outward forms of respect that were exacted from them, when they were boys. The Governor in Council expects that they will do their utmost to inculcate the same high tone of feeling and standard of behaviour in their own children and pupils. This is manifestly demanded alike in the interests of the parents, of the boys and of the country as a whole.

6. The Governor in Council is, therefore, determined that breaches of discipline in schools, and lawlessness, rudeness, and discourtesy in or out of school shall not be tolerated in schools maintained or aided by Government, and any measures which managers or masters may take to enforce authority and to check the growing laxity of manners will receive the fullest support.

7. Masters are too prone to believe that their success is to be measured by the number of boys in their schools. This is an entire mistake. Rude, undisciplined and disobedient boys should be ruthlessly weeded out. Boys taking part in seditious or disorderly proceedings should

be expelled. In their own schools and in those which they aid, Government attach much more importance to quality than to numbers.

8. Inspecting officers will be directed to pay surprise visits to schools, and to warn masters, if necessary, that they are not acting up to the standards required by Government. It is expected that the managers of aided schools will recognise that they ought to maintain the same standard of discipline that Government will exact in their own schools, and that the acceptance of aid from Government implies a general willingness to fulfil as far as possible the requirements of Government. There is no obligation to contribute to the support of institutions which are not rendering effective service to the people.

9. The Governor in Council believes that good would result from more frequent consultation between managers of schools and Government officers both of the Educational and the Revenue Departments. Parents also should be called into council as much as possible, and the objects of Government should be explained to them. The Government will endeavour to provide, in their own institutions, as high a standard of education as financial conditions permit, and will continue their aid to other schools and colleges. It must, however, be clearly understood that hostility to Government is incompatible with retention of students in the former and with grants to the latter.

10. In all Government and aided secondary schools, His Excellency requires a strict observance of the following conditions:—

(1) Strict regularity and implicit obedience must be exacted in class.

(2) Any reported or observed objectionable conduct out of school must be sternly punished.

(3) Parents must be given to understand that they cannot dictate to managers, but that the managers have a right to say on what conditions they will admit or retain boys in their schools. A great deal of the prevailing laxity in schools comes from the fatal oriental habit of yielding to importunity.

(4) The present habit of appearing both in class and in public in dirty and untidy dress must be suppressed. Decent native clothes are very cheap and are easily kept clean.

(5) Politeness and courtesy must be inculcated, and any approach to rudeness or ungentlemanly speech or conduct should be punished.

(6) Such papers only as Government from time to time sanction shall be admitted to reading rooms of schools and hostels or subscribed to by students.

(7) No school-boy shall attend or take part in the organization or conduct of any public meeting of any kind.

11. The above rules will apply to all schools and colleges, Government or aided, except that college students may attend public meetings with the previous permission of the Principal, to whose discretion it shall also be left what papers are admitted into the college.

12. It is expected that the managers of aided primary schools in large centres will give effect to these rules so far as they are applicable in their case. Separate instructions will be issued to mofussil school-masters.

R. E. ENTHOVEN,
Secretary to Government.

Circular to masters of primary schools in the mofussil printed as an accompaniment to Government Resolution No. 2896, dated the 30th September, 1908.

To Masters of Primary Schools in the Mofussil.

1. The Sarkar has heard that some of you disobey the rule which forbids you to go to political meetings or speak in public on politics. You must obey the rule.

2. You are not to take newspapers into school, or to allow any one else to take them in.

3. Some of your boys are often rude to people in the streets. It is your business to teach them to be well-behaved and to punish them if they do not obey you.

4. You are to try to persuade parents to make their boys obedient and polite, and to make them regular in attendance at school.

5. When political meetings are held you are not to allow your boys to go to them, and you are to try to persuade parents help you in keeping them away from them.

6. You are to make your boys be as clean and tidy as possible.

NOTIFICATION.

No. 1570-A of 1909.

EDUCATIONAL DEPARTMENT.

Bombay Castle, 4th August, 1909.

His Excellency the Governor in Council is pleased to approve the following rules of discipline for Government schools:—

General Rules of Discipline for Government Schools.
[N.B.—A copy of these Rules is to be given to the parent or guardian of each boy on his first admission to the school.]

1. Parents or guardians who send their boys to Government schools must understand that by so doing

THE ORIENTAL RESEARCH INSTITUTE, POONA.

AN APPEAL.

The public are by now aware that an Oriental Research Institute bearing the name and designed to perpetuate the life-work of Sir Ramakrishna Gopal Bhandarkar is about to be established in Poona. The scheme was formulated some twenty-three months ago and the public have been kept informed of its progress through the annual report of the Working Committee published last July and through occasional communications to the Press since. That an Institute of the kind proposed, aiming as it does to foster that happy combination of the sound traditional learning of the East and the critical scientific methods of the West which was best illustrated in this country in the person of Dr. Bhandarkar himself—the 'Nestor of Indologists' as another eminent scholar appropriately calls him—that such an Institute is a crying need of Oriental scholarship in India no more needs any proof. The very response that the scheme is evoking from the cultured public, including the students, friends, and admirers of Sir Ramakrishna himself, would bear eloquent testimony to the same; and even Government, in spite of the present abnormal conditions, have expressed their readiness to help the cause, financially and otherwise, to the extent sought.

Till now the Institute has been able to acquire by purchase some 15 acres of land and construct upon it a large, artistic and fire-proof building costing over 25,000 Rupees. Two more halls, one on each side, besides quarters for students, staff, and menials, are yet to be added; and while the nucleus of a permanent fund is created by the purchase of some 1947 war loan, it is evident that in order to carry out to the full the programme of work which the Institute has placed before itself this fund will have to be very considerably augmented. All this necessarily presupposes a much larger share of public support than what we have

they agree to delegate to the Head Master and the Educational authorities the control which they are entitled to exercise over such boys in all matters connected with such schools and that in all questions of school discipline both inside and outside the schools the decision of those authorities is final.

2. Every application for admission or withdrawal should be made to the Head Master by the parent or guardian of a boy in person or by letter. Applications for admission must be accompanied by a leaving certificate from the school last attended.

3. The school fee must be paid monthly in advance on the day fixed for that purpose. If a boy wishes to leave the school his parent must give notice of his intention before the end of the month; else the fee for the following month will have to be paid.

4. The Head Master will exercise his discretion in admitting a boy or retaining him in the school. For breach of the school rules a boy may be fined or otherwise punished at the discretion of the Head Master.

5. Boys are required to be regular and punctual in attendance. Leave of absence should be applied for either in person or by a note signed by the parent or guardian and it will lie with the Head Master to grant or refuse such leave. If a boy is absent without leave he will be required to bring a note from the parent or guardian explaining his absence, but it will be for the Head Master to decide whether the reason assigned is sufficient.

6. Parents or guardians will be held responsible for any damage done by boys to any part of the school property.

7. Boys are required to be clean and tidy, orderly and respectful, both in class and in public. Rude, disorderly or other objectionable conduct out of school will be punished.

8. No boy is to attend or take part in the organization or conduct of any public meeting of any kind, or, without the express permission of the Head Master, in the collection of any fund.

By order of H.E. the Honourable the Governor in Council,

R. E. ENTHOVEN,
Secretary to Government.

been so far able to attract. We realise that this is an awkward time to ask the public to give money for anything but the successful prosecution of the present world-war; but seeing that in normal times Government themselves would have assisted the scheme far more liberally than at present we venture to suggest that any help, small or great, rendered to an educational Institute like ours would indirectly serve the same purpose, especially if it is remembered that an Institute like this is sure to be a very powerful factor, though an indirect one, that would ultimately work for the realisation of that judicious, and all-absorbing national consciousness to which all the forces around us seem to be at present tending.

As originally contemplated the Institute is to be formally inaugurated on Friday, the 6th of July 1917—Dr. R. G. Bhandarkar's 80th birth-day—by the opening of its main hall. On that same day there is also to be a presentation to Sir Ramakrishna of a gift worthy of the scholar and one most suited for the occasion,—namely a volume of essays on various subjects written specially for the purpose by scholars of different lands. This volume is in the press and will be out in time. With his usual courtesy and kindness and readiness to associate himself with all movements of this kind, H. E. Lord Willingdon, the Governor of Bombay, has consented to perform the inauguration as well as the presentation; and for a unique occasion like this we expect to have a large muster of Sir R. G. Bhandarkar's students, friends and admirers and of all lovers of Oriental learning generally. We are drawing up a list of such persons, to whom formal invitations will be sent in due course. But as ours claims to be an all-India Institute and as Dr. Bhandarkar's pupils and personal friends and admirers are in evidence almost in every town, district and province of India it is almost impossible to hope to reach them all by invitations through post. We beg that all such persons would take this as a personal invitation and make it convenient to attend.

We are also drawing up a list of all those who have joined our Institute as Life-Members (Rs. 100), Benefactors (Rs. 250), Vice-Patrons (Rs. 500) and Patrons (Rs. 1,000). The list will be published on the day of the opening of the Institute, together with the names of persons who have promised to pay the Institute Rs. 10 or more annually. Other donations to the Institute will also be announced at the same time; and we hereby beg to appeal to all persons interested in the movement and all in whom the name of Dr. Bhandarkar inspires affection, admiration or reverence to assist in the proper celebration of this unique function on the 6th of July by being present personally or otherwise expressing their sympathy in some tangible form.

To Dr. Bhandarkar's old students and personal friends in particular we hereby wish to announce that if a sufficient number of these will make it convenient to come, it is contemplated the day after the formal function, to do something or other of a more private and personal nature by way of a further token of loyalty and regard for our veteran Guru; and it is requested that all suggestions, etc., in connection with this be forwarded early to

339, NARAYAN PETH,
POONA CITY,
4th June, 1917.

THE SECRETARIES.

SWAMI VIVEKANANDA—A SKETCH

By Mr. M. S. NATESAN,

Teacher, H. S. School, Trichinopoly.

Price Annas Six. Postage, etc., extra.

Srinivasa Varadachari & Co., Triplicane, Madras.

TUTORIAL SYSTEM.

The following order—No. 608, Home (Education, dated the 7th May 1917, has been issued:—

Among the defects in collegiate education in this country to which criticism has been directed from time to time particular stress has been laid by thoughtful observers on the lack of that corporate life and feeling which is so marked a feature of University life in Great Britain, more especially at the older foundations of Oxford and Cambridge. As regards the students themselves much has been done in recent years to promote social relations and common interests by the institution of hostels, by the provision of play-grounds and by the promotion of inter-collegiate competitions, debating and literary societies and other similar organizations. Further development as regards hostels and play-grounds must depend largely on the restoration of normal financial conditions and it is the intention of the Government, when circumstances permit, to improve and extend the facilities which such adjuncts to educational institutions undoubtedly confer. Any advance towards commensality must of course be gradual and voluntary in this country, but its absence need hinder the growth of a sound corporate life or prevent a college from securing the loyalty of its *alumni* and their continued and grateful interest in its welfare and good name. If these objects are to be secured however, it is not enough to promote personal relations among the students themselves; the association of the students with the members of the teaching staffs in relations of mutual friendship and of personal sympathy is also necessary.

The Government recognise that many members of these staffs do take an interest in the welfare of individual pupils and in such collegiate activities as exist. They also recognize that further progress in this respect must in part depend on the development of a residential system which

will include always some proportion of the teaching staff. They consider however, that even under existing circumstances more could be done to enlarge such personal relations. They have therefore given careful consideration to the matter and are of opinion that valuable results may be expected from the extension to all Government colleges of a tutorial system already, they understand, tentatively introduced in one or two cases.

The general lines on which, in the opinion of the Government, this system might suitably be introduced are laid down hereunder and the Director of Public Instruction is requested to take steps for its introduction into all Government colleges as soon as the necessary arrangements can be made.

Each student of a college will be assigned to a member of the staff who will be regarded as his tutor. The tutor should, where possible, be the Professor or Assistant Professor of the principal subject of the student's course. He will be expected to see each individual student under his tutelage periodically so as to have an opportunity of discussing with him matters affecting his general welfare and the progress of his studies. He should also arrange a time on some fixed day in each week at which students assigned to him will be at liberty, if they so desire, to consult him on any point on which they desire advice. The information and insight thus acquired will be of great assistance to Principals of colleges who by regular consultations with the tutors will be enabled to acquire a personal knowledge of the progress, activities and needs of individual students which would otherwise be impossible.

The success of this system will of course depend on the spirit in which it is worked. The Government confidently hope that the members of college staffs will co-operate in making it a success and welcome the opportunities which it will give to mould and influence in the right direction the characters and dispositions of those placed under their immediate care.

NATIONAL EDUCATION.

MR. FISHER'S STATEMENT.

In the House of Commons on April 19, the House went into Committee of Supply on the Civil Services Estimates.

Mr. Herbert Fisher (Sheffield, Hallam Div. L.) on rising to explain the Education Estimates, was received with loud cheers. He said:—I must ask a very large measure of indulgence from the Committee, more especially since I shall find myself unable to discharge my duty in reference to the Education Estimates within the narrow limits of time appropriate to the first quavering utterances of a new member. I believe, however, that there is in this House, and not only in this House, but in the country at large, a quickened perception of the true place of education in the scheme of public welfare, and a very earnest resolve to give to our national system, if it can be called national, and if it can be called a system, all the improvements of which it is capable. Indeed, nothing has been more remarkable than the attention which has recently been paid both in the public Press and on public platforms to the subject of education. One might have imagined that the war would have so occupied and exhausted the mind of the country as to leave room for no other thought. But this has not been the case. The war has had the very opposite effect. Quite naturally and as it seems to me quite rightly, this great calamity has directed attention to every circumstance which may bear upon national strength and national welfare. It has exhibited the full range of our deficiencies, and it has invited us to take stock of all the available agencies for their improvement.

Another feature of the present situation which cannot fail to have impressed Hon. members of this House is the remarkable interest which is now exhibited in education, which is evinced in two quarters from which a clear note has not always hitherto been sounded. Trade Unions are demanding educational reform. Many of the most enlightened employers and manufacturers are actively promoting it. There is now a prospect new in my experience, and so far as I know new in the experience of this country, of the co-operation of the commercial and industrial interests of this country with the thoughtful energetic portion of the population to

secure not only a higher standard of industrial and commercial fitness, but a higher level of general education. Not less significant is the remarkable consensus of opinion both as to our present needs in the field of education and as to the main lines of educational reform. I will not attempt to disentangle all the threads of thought and feeling which combine this movement. Some minds attach importance to education as to the foundation of industrial and military strength, others are principally affected by the prospect that in the spread of education they may find the resolution of the discords in our industrial life. I notice this also—that the calamitous destruction of young lives in the present war, lives of the first promise, does impose a solemn obligation upon Parliament so to provide for the future that the rising generation, which will be deprived of its natural and predestined leaders, may be prepared to furnish an adequate measure of service to the community.

A LARGE INCREASE OF EXPENDITURE.

I make these preliminary observations, because in the Estimates I am submitting to the Committee I am proposing a large increase of expenditure. The sum which the House of Commons will be asked to vote for the service of education in the year 1917-18, being greater by £3,829,048 than the amount voted by Parliament in the year 1916-17, will involve the largest increase as compared with the Estimates of the preceding year which is known in the history of the Board. This increase does not appear in the original Estimates which were printed at the usual time and have been for some time past in the hands of Hon. members. It appears in the Supplementary Estimate bearing a recent date. Accordingly it will be convenient if I deal first with the Estimates which have been prepared and printed in the ordinary course, and which relate to the normal upkeep apart from those special developments which will require increased grants.

The Committee will notice that these Estimates provide for an expenditure by the Board of Education in the year 1917-18 amounting to £15,159,780, being less by £26,952 than the amount voted by Parliament in the year 1916-17. These Estimates are, as they were last year, on a war footing of

retrenchment. Last year they were so closely clipped that they showed a reduction of £294,646 on the Estimates of 1915-16, and very little further shrinking is to be expected. Three of the causes which were at work last year to reduce the Estimates did not quite reach their fullest effect, and are now responsible for a further reduction. I refer to the departure of military students in the Training Colleges on military service, the cessation of building operations and to the shutting down of evening classes in the lower grades of technical work. These retrenchments, coupled with further retrenchments on museums and sundry similar institutions, amount altogether to £106,599, against which there is a net increase of £78,462. There is an increase of £3,235 under the heading of "Administration, Sub-head A"; an increase of £28,927 granted to elementary schools, sub-head C; an increase £42,800 granted to secondary schools, sub-head E; and an increase of £3,500 granted for the Imperial College of Science and Technology under sub-head G. The chief part of the increased cost of administration consists of the provision of expenses for certain committees, which have been appointed to report on questions affecting the future of education, and the remainder relates to the ordinary annual increment to the salaries of the staff. The staff itself is more depleted than it was last year, and it has been run at a less cost. But our Estimates bear the full salaries of those officers of the Department who have been lent of other Departments, and of those who have gone on military service. While I am on the subject of the staff, I should add that 669 members of the Board staff have gone on military service. Of these 42 have been killed in action or have died on active service, and five are reported as missing. Since the beginning of the war no fewer than 297 members of the Board's staff have been loaned to other Departments, and at the present moment 159 of the Board staff are thus on loan. I learn that the services of these officers are greatly appreciated, and I am not surprised to hear of it.

SECONDARY SCHOOL GRANTS.

I now come to the second item in the scale of our Estimates, the increase in the expenditure on elementary schools arising partly from normal

growth of pensions to teachers partly to two new developments of great interest and promise. I allude to the provision of new grants for evening play centres, a movement which we all honourably associate with the name of Mrs. Humphry Ward and partly to the new provision of grants for the organization and provision of physical training. I allude to these developments with the great pleasure in view of the fact that they have received the favourable consideration of my distinguished predecessor, Lord Crewe, who undoubtedly would have carried them out if time had permitted. The increase in the secondary school grants is due to the increase in the number of pupils on whom grants will be paid during the financial year, and it is a matter of no little signification that one of the most immediate results of the increased prosperity of the working classes during the war has been the increase in the number of pupils entering our secondary schools and the length of their stay in those schools. I have now mentioned all the respects in which the ordinary Estimates differ from last year; and the next effect is that after setting off the increase against the decrease the sum asked for is less by £26,952 than the sum voted last year.

But these Estimates do not and should not stand alone. The total expenditure of this country in England and Wales may seem to be large. Some 16 million pounds are paid out of taxes, another 17 millions out of rates, perhaps some seven millions more come out of fees, voluntary contributions and endowments. This makes a large sum which amounts to £40,000,000. But it must be taken in the general context of national expenditure. It is eight times the value of our annual importation of oranges and bananas. It is four times the value of the estimated saving of this country through the partial substitution of margarine for butter, it is one and one-third times the value of the annual expenditure on tobacco, and it is almost one-fourth the value of the annual expenditure on alcohol. I have stated articles of luxurious expenditure with respect to which it is always a matter for us whether we can afford to spend the money. When we are considering a form of productive expenditure, which is not only an investment, but an

insurance, the question cannot stand alone. We must ask not only whether we can afford to spend the money, but whether we can afford not to spend the money. And the supplementary question is more important and more searching than the question on the Paper.

When I ask the House to commit itself to a large additional expenditure on public education I may very properly be asked whether the country is getting full value, or at all events good value, for its present expenditure. I confess that the profit to be derived from the system of education cannot be assessed by arithmetic or proved by geometry. Educational advance cannot be measured by the things which are taught, but only by the things which are learned, and things which are learned are often quite imponderable and not to be measured by the standard of any definite intellectual acquisition. It is easy to pick out a black patch here and there and to paint a dismal picture of the progress of our civilization. But on the comprehensive view, can any one pretend to doubt the very real effect which the system of our popular education has had upon the improvement of the morals and refinement and the development of the skill, knowledge, and intelligence of our working population? The enormous increase in our population since 1870, when elementary education was introduced, has been accompanied by a marked decrease in crime. Illiteracy has been reduced to comparatively small dimensions. In 1862, 225 married men out of every 1,000 were unable to sign their name; in 1907 the number had fallen to 14. Good books are now read in larger numbers and by a wider circle of people and there has been a vast increase in the demand for treatises on economical and social problems and on the technique of various trades. I should like also to add that the progress has been especially rapid since the Act of 1902. Apprehensions were entertained that the new administrative machinery set up by the measure introduced by my right hon. friend the Minister for Foreign Affairs might have the effect of sapping the foundation of local interest in education. Whether that has proved to be the case or not—and I imagine that you would get different answers to the question from different parts of the country—there can be no question that

the past decade has witnessed a very substantial measure of educational progress.

ELEMENTARY SCHOOLS AND THE NEW ARMIES.

If anybody had doubted the value of our elementary schools, that doubt must have been dispelled by the experience of the war. An immense Army has been suddenly formed out of volunteers, and it has proved in a very short space of time a match at every point for the forces of the first military Power in Europe. This Army was largely recruited from the elementary schools, and I venture to assert that so sudden and brilliant a military improvisation could never have been achieved if we had been working upon the basis of a population entirely uneducated. Perhaps the Committee will allow me to cite two pieces of evidence, one from the Army and the other from the Navy, in support of the proposition that the country owes not a little to its public elementary schools in the present strife. An officer in a Lancashire Regiment writes that the second and third line troops could never have been raised and trained in time but for the public elementary schools. In many cases the commanding officers of the third line had actually to make officers and non-commissioned officers almost wholly from the products of the public elementary schools. He says they had no Army schools for the men, nor the time for instruction, and consequently they had wholly to depend on what the public elementary schools had sent. Here is the voice of the Navy. A commander of a light cruiser flotilla, manned almost entirely by hastily levied hands from the merchant service, or from ordinary civil employment, writing spontaneously to one of our inspectors, says:—The way these fellows picked up the job seemed to me perfectly marvellous. There is something in your damned Board School education after all.

I record his observation, which I quote with blushing temerity, as a very splendid testimony. Yes, there is something in the education of our public elementary schools. I have here the records of a council school in Northumberland, which sent 263 Volunteers to the Army, three of whom hold commissions as captains, eight as lieutenants, 26 as second-lieutenants, while out of 21 of these men two hold Military Crosses, four have received the Military Medal, one the D.C.M., another the D.S.O.,

and several have been mentioned in despatches. This roll of honour is not confined to any one school or any one district. You will find them scattered throughout the length and breadth of the land, and they are worth something to the country, and many argosies of oranges and bananas. I make, then, no apology for our scheme of popular education or for the money which is spent upon it. I am sure that on the whole the country is getting at least as much value for what it spends in the sphere of education as it gets from its expenditure in any other direction.

TEACHERS AND THEIR SALARIES.

In education almost everything depends upon the personal element. If a teacher is good and is thorough in his work, and if he is fond of children, and if he is alert, understanding, sympathetic, firm, and yet good-humoured, success is secured. If the teacher is bad the most costly buildings and equipment will not make up for his defects, and your educational system is a failure. On the whole we have been remarkably successful in the teachers whom we have obtained for our State-provided and State-aided schools, having regard to the slender remuneration which we offer to them. There are, of course, varieties. Like every long service profession the teaching profession shelters men who have outlived their zest and appetite for work. But I would ask any member of this House who has much familiarity with the working of our public elementary schools, and I know there are many such members here, to contrast his impression of our teachers to-day with the picture which Macaulay painted in the House of Commons in 1847 of the teachers of that day:—

"The refuse of all other callings, discarded footmen, ruined pedlars, men who cannot work a sum in the rules of three, men who cannot write a common letter without flaws, men who do not know whether the earth is a sphere or a cube, men who do not know whether Jerusalem is in Asia or America."

We must take the profession as a whole, and taking it as a whole I am struck by the great number of industrious and devoted teachers, men and women, who work in our schools.

But the average pay of the teacher is far too low. The average salary for the certificated head teacher is £176, and for the certificated assistant teacher £129, and for the uncertificated assistant teacher £68. The salaries for women are lower; £126 for the certificated woman teacher, £95 for the certificated woman assistant teacher, £56 for the uncertificated assistant teacher, and £40 for the supplementary teacher. The certificated teacher is a man or a woman who enters the profession after some years of preparation for it. His skill and attainments are severely tested before he is admitted. He does not begin work until he is 21 or 22 years of age. And yet there were before the outbreak of war 42,200 certificated teachers, males and females, drawing salaries of less than £100, and 26,700 drawing salaries of less than £90 per annum. The case of the uncertificated teachers, who are persons with qualifications, is even worse. Is it to be wondered at that the profession is held in slight esteem? Is it to be wondered at that teachers in our public elementary schools find it difficult to regard themselves as members of a liberal profession, and that it is becoming more difficult to find recruits of the right quality in adequate numbers?

The problem of recruitment was already serious before the war, and it will be more serious still unless steps are promptly taken. It has been calculated that 9,000 entrants are annually required to repair the wastage in our elementary schools; but I think that will certainly prove to be a very considerable under-estimate if any real attempt be made, as must be made to reduce the present deficiencies and to extend the scope of popular education. I regard it as essential to a good scheme of education that teachers should be relieved from perpetual financial anxiety and that those teachers who marry should be able to look forward to rearing a family in respectable conditions. The first condition of educational advance is that we should learn to pay our teachers better, and the only certain way of securing that any extra money available for elementary or secondary education should go into the pockets of the teacher is for the State to pay the teachers direct.

PROPOSED GRANT OF £3,420,000.

But the establishment of the teaching profession as a branch of the Civil Service would cut at the roots of our local system of education. I do not so much fear the enslavement of the public intellect to a corps of State teachers, because, do what we will, we can never make a German out of an Englishman, let alone out of a Welshman. But I do fear a very great and abrupt decline in the local interest in education if the control of the teaching and the payment of the means of control is withdrawn from the local authorities and invested in Whitehall. For this reason I do not propose to recommend this treatment of the problem. I intend to approach it on other lines. I am going to ask the House to sanction an additional grant for elementary education for £3,420,000, Commander Wedgwood.—A motion for £3,420,000, framed upon a principle which will give a direct interest to the local authorities to enact a liberal salary scale, and I believe that by this plan my object will be attained without any undue invasion of the sphere of local autonomy. One of the advantages incidental to this proposal is that it will readjust the financial relations of the Treasury and of the local authorities, of the taxpayer and of the ratepayer, upon a more equitable basis. It is common knowledge, that during the past 10 years the proportion of educational expenditure borne by the Treasury has diminished, while the proportion borne by the ratepayer has steadily increased, and this has gone on to such an extent that it is not to be wondered at that the ratepayer feels that if he is to be called upon to bear any further educational burden a higher contribution should be borne by the State. The Committee will remember that the present Prime Minister when Chancellor of the Exchequer appointed in 1912 a Departmental Committee under the chairmanship of Sir John Kempe to report on the changes which had taken place in Imperial and Local taxation and that Committee presented in 1914 a report which, if I may say so, is a model of excellence in its survey of a complicated range of facts and in the skill in which those facts are focussed. With certain modifications I have adopted the recommendations of that Committee as the basis of my present proposals.

First of all we desire, as the Departmental Committee

desired, to find some better principle of partnership between the State and local authorities than that which has hitherto prevailed. We do not admire, or wish to retain, a system under which a fixed contribution is made by the State to meet a growing burden, but we desire to replace it by a system under which, as the burden increase so will the State contribution increase. We propose accordingly an automatic expansion of the grant to follow upon and keep pace with the expansion of education.

Next, Sir John Kempe's Committee desire to make the State contribution dependent not merely upon the expenditure of each area, but also upon the size and ability of the areas to pay. We measure the task, as did Sir John Kempe's Committee, by the average number of children in the elementary schools, and we measure the ability of the area by the assessable value. The more populous the area is and the poorer it is in rates the more will benefit under our proposal. More grant will be paid to poorer authorities than to richer authorities, more to a generous authority than to a niggardly authority, more to an authority which believes in flesh and blood than to an authority which puts its trust in bricks and mortar.

Although I have for convenience of exposition dealt separately with the rate factor and the expenditure factors, the formula and its working will be a single whole. The cost of applying that formula throughout the country amounts to something more than £15,000,000. We do not propose at the present time to interfere with any of the existing grants, and we do not intend to add over £15,000,000 of new money to the existing grants. What we propose is that in all those areas where the existing grant falls short of the sum which will be reached by our formula to make the supplementary grant on the top of the existing grants so as to bring them up to the amount ascertained by our formula. If the area does not make that amount of grant we shall not be concerned to go out of our way to give extra assistance beyond the statutory share of the supplementary grant. We have a similar proposal as to the maximum grant. So long as an area is raising a rate of at least 1s. in the pound it may receive whatever share of the supplementary grant

it is entitled to under our formula, but if it is not raising a rate of at least 1s. we shall not pay a supplementary grant to it beyond a certain limit. That limit is the amount which would bring the State contribution up to two-thirds of the cost of education in that area. To put it in another way, the State will not in any area bear more than two-thirds of the total cost of education unless the area is itself making a fair effort to bear the burden represented by at least a rate of 1s. in the pound.

OTHER CONDITIONS OF THE GRANT.

I pass on to educational and administrative conditions to be attached to the grant. In the regulations we take power, before paying the grant in any new year, to review their provision made for elementary education by the authorities and to consider its adequacy and efficiency in relation not only to the local needs and circumstances, but also to the development of a satisfactory system of elementary education, including the establishment of a teaching service, on a sounder basis throughout the country. In particular, we give notice that we intend to have regard among other things, to the provision made in the area as a whole for the following objects:—First for maintaining an adequate and suitable staff of teachers; second, for securing the progress of the older scholars by means of special schools or otherwise; third, we shall have regard to the provision made in the area as a whole for the teaching of handicrafts, cookery, gardening and other special subjects; fourth, the efficiency with which the law of school attendance is administered. If the Board is not met on any of these points they may after the first year withhold or reduce the grant, and if the amount so withheld or reduced is more than 1s. per unit in attendance they will present a report on the subject to both Houses of Parliament.

One other observation may be permitted on the proposed new grant for elementary education. While we intend to give a direct inducement for the payment of adequate salaries, and while we propose also to attach certain general conditions to the grant, we do not contemplate any minute interference with the local authorities. We have not earmarked part of the grant for this purpose or for that. We feel that the authorities which have the

responsibility of administering the Education Acts should have reasonable latitude as to their expenditure. We do not, therefore, propose to prescribe the definite salaries payable by the authorities. But I am greatly dissatisfied with the existing variety of scales, which go far beyond any variety which can properly be considered as reflecting local conditions and, since the principle is a matter of some complexity, I am preparing to invite members of the several interests concerned to help me to explore it. There is, however, one exception in this policy of latitude to which I must refer. Our intention is to ask the local education authorities to conform to a schedule of minimum salaries for certificated and uncertificated teachers.

I claim for the proposed new grant for elementary education that it will provide a more equitable adjustment between local and central expenditure, that it will enable better salaries to be paid to the teachers, that its incidence will be equitable as between rich districts and poor districts, and that, being expansive and responsive, it will act as a powerful and effective lever of educational reform. I may add, that it will place poor authorities in a better position to undertake the very necessary work of consolidating the different grants for elementary education and place the whole finance of elementary education for the first time on a scientific basis.

SECONDARY EDUCATION.

I now come to the second item in the Education Estimates, the grant of £433,900 for secondary education. The secondary schools are the key of the situation. Our elementary teachers must be trained in secondary schools, our professional men, our University students, and our leaders in industry and commerce should have, if possible, a full secondary school education. I really regard it as one of the weakest points of our education system that so small a proportion of our population proceeds to the secondary schools, and that so small a proportion of those students who enter a secondary school are able to stay the full period. If we desire, as I submit we should desire, this secondary education for all boys and girls in this country who are capable of profiting by it, we must look far outside the orbit of our public schools,

We must look to the schools which are aided or provided by local public authorities. In these schools the fees are low, and there is, thanks to a regulation which we owe to Mr. McKenna, a large number of free places reserved for boys and girls who have been in public elementary schools. About 24 per cent. of all the pupils in the secondary schools on January 31, 1914, were ex-public elementary scholars holding free places. 2 per cent. were holders of scholarships and 65 per cent. of the total had previously attended public elementary schools. I think it will be well to notice that, although our highway from the public elementary school to the University still needs considerable improvement, it is very much the widest highway in any of the great European countries. But even with low fees and free places it has proved so far impossible to keep the majority of children in the school up to the age of 16. They are leaving all the time. How can there be any suitable corporate life, any completely effective scheme of education under conditions so prejudicial as those?

There are other palpable defects in our system. The calling of the secondary school-master in a State-aided or State-provided school has yet to be made reasonably attractive to a really able man. At present the secondary school teacher is ill-paid, he receives no pension, and yet his is a profession which ought to compete on equal terms of ability with that of the first-class Civil servant. In no advanced country but England will you find so large a proportion of secondary school teachers without a University degree. Somehow or other we must attract able men into this branch of the profession and provide them with a sufficient number of pupils able to receive a full secondary school education.

GRANTS TO SECONDARY SCHOOLS.

The grant which has been placed upon the Supplementary Estimates will go some way towards remedying this admitted deficiency. It will enable the secondary school teacher to receive a better salary, and it will enable him to contribute to a pension fund. It must also be remembered that while the cost of secondary education has increased and is still increasing, the scale of the Board's grants, which was fixed in 1907, is stationary, so

that the increased cost has either fallen upon the rates or upon the parents, or has not been met at all. This sum of the additional estimates for the secondary school is not like the contribution to elementary education, an area grant. It will be distributed among the secondary schools according to the principle which is already adopted. There are, as the Committee are aware, some schools which are having the full grant of £5 per pupil. There are others—48 in England and one in Wales—which earn grants on a lower scale of £2 per pupil. We propose to raise the grants made to them by £2. We believe that this will be the least invidious way of helping secondary schools, and, what is more important, the most effective way of securing to the children attending the State-aided secondary schools of the country a better education. It must not, however, be thought that the secondary schools in this country can be put upon a satisfactory basis merely through the operation of such an additional grant as is suggested. The grant will be, if applied solely to the salaries of the secondary school teachers, enough to raise them by about 14 per cent. and, as I have said this grant, when supplemented by a Pension Act for secondary school teachers—a Bill for which I hope shortly to introduce—will provide a very substantial improvement in the teachers' position. We think further assistance should be given to enable secondary schools to provide advanced courses so planned as to lead up to a standard such as is required for entering upon an Honours course at a University or institution of University rank. Accordingly in our new regulations we provide that assistance shall be given to organized courses of advanced instruction recognized by the Board. To schools establishing such advanced courses we propose to make grants not exceeding £500, and among the conditions attaching to these grants is a stipulation that the Board must be satisfied that sufficient assistance is given in the schools for poor children taking the course.

NEED OF SOCIAL FUSION.

It has been suggested to me that secondary school education should be free and the establishment of a system of free secondary education is an ideal with which I have very great sympathy. It may be that the simplest way of attaining this

object would be to abolish all fees in secondary schools. Well, that would mean that if the schools were to go on at their present level of efficiency, someone—and I suppose the someone would be the State—would have to find a revenue of about one million pounds a year, which would be struck off by this stroke of the pen. I doubt myself whether there are many reforms worth having which can be achieved by a stroke of the pen, and in the present instance I think that the assumed advantages of that reform would be more than counter-balanced. It must be remembered that a great part, and not by any means the least valuable part, of secondary education is supplied by schools provided or completely controlled by local education authorities, and the administrative and financial operation of freeing secondary schools would not only be much more complicated than is generally realized, but would certainly raise highly controversial questions.

I am fully aware of the imperfections of our existing scheme of secondary education finance, and I hope to effect a substantial improvement in it. But I think we should do well in the first instance to concentrate on the organization of a better system of maintenance allowances, especially in the upper parts of our secondary schools. After all, it is important that in our secondary schools the son of the manufacturer, the son of the foreman, and the son of the workman should be educated side by side. We do not want a caste system of education. We want social fusion, and the best way of securing social fusion in the secondary schools is to have a system under which well-to-do parents contribute their fees and help to support the school while the children of poorer parents are assisted, and liberally assisted, by free places and maintenance allowance.

What this House and this country are, I believe, really anxious to know, is in the first place, whether the Government is seriously resolved to undertake the solution of the educational, administrative, and financial problems involved in any attempt to remedy these admitted defects; and, in the second place, whether this attempt will be made systematically and comprehensively on a well considered plan. On the first point I say with confidence that I have every reason to believe that His Majesty's Government is in earnest in this matter. As regards the second point I can assure the House that all the problems of public education are being considered in relation one to another, and not in a fragmentary or opportunist manner.

PLANS FOR THE FUTURE.

AN OUTLINE.

Since I came to the Board of Education I have had the advantage of much consultation with men representing the most diverse interests both educational and industrial, and I do not think that I am over-confident in saying that I see my way clear to a really systematic and many sided development of the organism of public education. I hope that next year's estimate may make provision for such future development as can be made in the ordinary course of administration. For other developments, perhaps of the greatest importance, legislation will be necessary. I may be permitted to mention in advance one or two of the main lines upon which I hope to proceed. No scheme of University development would, in my opinion, be satisfactory which did not make ample provision for the prosecution of free and independent post-graduate research, for scholarships for science, technology, and modern subjects. We desire that every child in this country should receive the form of education most adapted to fashion its qualities to the highest use. This will mean that every type and grade of school in the country must be properly co-ordinated. Our Estimates introduce the principle of area grant, and they attach to it general conditions, one of which is the due provision of higher education. But they do not compel local education authorities to make this provision. That will require legislation. We think that the time has now come when the country should no longer be content to leave so important a matter as this to the discretion of the local authority, and that no Education Bill would really be satisfactory which did not require the Committees of the county councils and the county boroughs to submit schemes to the Board concerning both secondary and elementary education.

Another question which is to be considered is the development of our country schools. In spite of our recent improvements, and there have been many, we continue to make too little differentiation between our rural and urban education and I have every hope that, with the co-operation of the Minister of Agriculture, improvements may be introduced into the education of country children calculated to mould a taste for country life and interest in all the common sights and scenes of the countryside and an intelligent use of all its various opportunities. I think it is generally admitted that our provision for

very young children, as also that for the children in the upper standards of elementary schools, is not altogether satisfactory. I propose to invoke the aid of Parliament to empower local education authorities to establish nursery schools for children under the age of five. At the other end of the scale a good deal may be done and should be done to diversify and improve the work of the upper standards of our elementary schools and to promote the growth of central schools. It may be assumed that a knowledge of the three R's is satisfactorily rooted and established by the 12th year, and during the two final years of school life these should be more handwork for the boys, more housework for the girls and more inspiring and literary education for both. Such improvements can be effected with a minimum of cost by a better organization of educational effort. It would, however, be necessary so to amend the law of school attendance as to secure for every boy and girl in the country a full period of school instruction until the 14th year.

THE CARE OF ADOLESCENTS.

I have still to touch on a grave deficiency in our educational arrangements, and I allude to the inadequate provision for the intellectual, moral, and physical discipline of young persons during the period of adolescence. We turn children out into the world at the ages of 12, 13, and 14, just at the moment when their powers of intelligent and independent receptivity are first aroused, and their schooling should be beginning to bear fruit. The results obtained by the evening schools are well worth having, but the number benefited is comparatively small, the attendance is spasmodic and irregular, and all experience tends to show that after a hard day's work young people are too fatigued to receive the full measure of benefit of evening classes. There are the Boy Scouts, Church Lads' Brigades, and Girls' and Boys' Clubs, all attempting to cope with this problem. In certain of our great industrial centres schools have been established by the intelligence and benevolence of individual employers. These agencies are all valuable, and, in my eyes, they are all the more value because they are voluntary. But their operation is partial, and they are not sufficient to secure the best result of elementary training for the great mass of the people.

LOST TRAINING.

I submit that the country does not get the full value out of its elementary system of education

because so much of the training and instruction is subsequently lost: and that it does not get the full value out of its higher technical colleges because those who attend their courses have learned little and forgotten much. It is clear that the country must do something to remedy this glaring defect in its system of national education. I do not couceal from myself that any scheme of continued education will be exposed to cross-currents of criticism. It will not be easy to establish a scheme at once sufficiently comprehensive and elastic to give the young people the continued education they should have without any undue dislocation of our industrial system. Yet this is what must be done if the State is to reap the full measure of advantage from its system of public education. Our desire is that our people should be good citizens, reverent and dutiful, sound of mind and body skilled in the practice of their several avocations, and capable of turning their leisure to rational uses. But what do we see? Our standard of physique as a nation is deplorably below that which so great a people should set before them. Our common taste in amusement, though greatly improved, is still in the main rude and uncultured. We have lost, and are now only beginning to recapture, something of the general taste in music which was long ago a special note of our civilization, but was banished to the mountains and valleys of Wales. Though we are an extremely clever nation when we choose to use our brains, we are only beginning to realize that the best capital lies not in cash and goods, but in the brains and bodies of the people.

It is time that all this should be changed. Economy is in the air. We are told to economize in our expenditure and foodstuffs. I suggest that we should economize in the human capital of the country which we have too long allowed to run to waste. I should not recommend any measure which would have that effect of disturbing the labour market during the war. But I hope that Parliament may see its way to assent to a measure which will give effect to the general principles which I have endeavoured to describe, so that the foundation may be laid for a patriotic and social education worthy of the genius of our people, and a fitting monument to the great impulse which is animating the whole nation in the war.

In the House of Lords on Wednesday, May 9:—

Viscount Haldane called attention to the policy of the nation in regard to education. He said the Government were to be congratulated on the way

their Minister of Education had entered upon his duties. Mr. Fisher's speech had given satisfaction everywhere for its high idealism and the large views and comprehensive purposes which it disclosed. As to the general tone of what Mr. Fisher had said, he had nothing to do but humbly to praise it. Education used to be a dull subject. It was so no longer. During a recent tour in the North of England he delivered a series of addresses on education, and instead of their being only 200 or 300 people present, as would have been the case before war, there were 2,000 or 3,000 present on almost every occasion. Nothing was more striking than the new interest which the democracy of the country was taking in the subject of education. Our position as a nation depended upon what we could produce and what we could do, and what we could produce and what we could do depended upon our training and knowledge. The general scheme outlined by Mr. Fisher was to him full of hope, but as to the organization by which it was to be carried into effect he did not feel quite so sure. What really was at the bottom of a great deal of their difficulties was that they had to deal with areas which were far too small, and, without interfering with existing legislation or interfering with existing authorities, there was a great deal which they might hope to do by inducing those authorities to co-operate and organize in large educational units.

DEVOLUTION.

The problems to be solved could never be solved by a highly centralized body in the region of Whitehall. Devolution was the remedy. They must begin by inviting the local education authorities to group themselves and the inducement to them to do so which he suggested was that the Board of Education instead of making large grants for certain subjects in isolated compartments and of different standards should give to properly constituted provincial committees of the local education authorities the administration of those funds under their own inspectors. It was difficult for Whitehall to deal with the schemes of 319 local authorities, but easy to deal with those of seven or eight provincial authorities. Dealing with the case of London continuation schools, he urged the necessity, when they were set up, of their being near the works, and said that the problem of continuation education must be on a much larger footing. With the establishment of a provincial authority instead of the isolated grants which existed at the present time there would

be a block grant. They could not get the best results if grants were split up into small sections instead of being applied to the system of education as a whole. Alluding to Mr. Fisher's proposal to deal with the subject of physical education, he said that whatever line they took they would have to make use of the training in the schools as a means of preparing the future potential soldiers. One did not wish to touch the elementary schools—the Boy Scouts would be there. But there was the period between 14 and 18, and he would like to see as a branch of the compulsory education which was to belong to the continuation school training in cadet corps and the annual camp. He should be very glad if in connexion with physical training the Board of Education took the War Office into confidence when that Department had formulated their plans as to what the Army of the future was to be.

The Bishop of Oxford said he noted with much satisfaction the increasing tendency among the best of the working classes and in an increasing area to believe in the value of knowledge. There had been, indeed, more progress among the working classes in that respect than almost any other class during recent years. He agreed that if there was to be any permanence in the school teaching the education should be continued from 14 to 18. The proposal that eight hours a week for 40 weeks should be required under compulsion of all young people from 14 to 18 seemed to him an inadequate measure, and he urged the Government to consider seriously whether it could have any reality unless it was accompanied by a compulsory reduction of the hours of labour. To be effective continuation schools must be conducted in the afternoon, and be a real substitute for labour instead of being an addition to it.

RELIGIOUS EDUCATION.

Seeking of the extreme importance of religious instruction as a part of education, he said that they had unfolded to them a great scheme of educational reform in which there was no mention at all of religion. He fancied that the reason why religious education had been given the go-by in Mr. Fisher's scheme was to be found in the attitude of the working classes. It was not that the working classes were irreligious, but that they had such bitter memories of the losses that had been sustained by education through religious controversy, and they were determined that religious controversy should no longer be allowed to pervert to disurb or stop educational reform. It was all part of the humiliating aliena-

tion of the workers from the Churches of the country. Educational reform should be allowed free scope unimpeded by the ancient religious controversy, and it should be recognized that afterwards the country must reconsider the question of religion in its position in education on a new basis. He was not without hope that when the question did again come to be reconsidered Churchmen and Non-conformists would find themselves much more united than they were before.

Lord Gainford said he was anxious that religion should be a part of our national system. But he found during the four years he was at the Board of Education that the problem as then presented was insoluble. He welcomed, therefore, the Bishop of Oxford's suggestion that the religious question should be allowed to stand over. The whole scheme of the Government depended on the creation of teachers, and he doubted whether the grants proposed would prove adequate to induce teachers to come forward. He suggested, therefore, that the teacher ought to be financed by the State during the period of his training, and until he was in a position to be appointed schoolmaster.

GROUPING LOCAL AUTHORITIES.

The Marquess of Crewe hoped it would be possible to do something real and practicable to encourage the formation of groups of local authorities. But he was not quite satisfied as to how far such grouping could be combined with the greater degree of educational autonomy which Lord Haldane favoured. His noble friend's scheme would seem to leave the Boards of Education almost entirely free of the detailed conduct of education. In that matter he thought we could learn more from the French educational system than from the German.

GOVERNMENT REPLY.

The Earl of Crawford said that when the war was over they would approach the question of religious education from a different perspective. He did not believe there was any hostility to religious education on the part of the parents of the children. There was only hostility to the machinery which was employed, and he was quite confident that with tact and judgment the difficulties could be adjusted. With regard to the suggested provincial areas, it was a question whether it would not be wiser in some cases to have more than one body with 'ad hoc' duties than to appoint one great body

on a geographical basis, which might not *ipso facto* be equally satisfactory, from an educational point of view. The fundamental point was whether progressive movements would be more easily attained through a group or a province than through the individual authority. In other words, would the local education authority be more sympathetic to pressure from a group of which it was itself a constituent member, or to pressure exercised from London? It was really somewhat speculative. He instanced the case of Liverpool and Manchester, and said he thought that the great authorities there would prefer, if pressure were needed, that it should emanate from a Government Department rather than from a sister or a rival city.

Again, the group as a whole might be somewhat less amenable to pressure from London than the individual unit. If there was an unprogressive area—it might be a whole county—on which the Board of Education was trying to bring pressure, by establishing the group system, they put another body between the Board and the unprogressive authority, and make it all the more easy for the unprogressive authority to obstruct a measure of reform. The Board of Education had for years been delegating greater freedom to local authorities, and he instanced the fact that in London officials conducted the inspection of schools. But the movement must be gradual. Local authorities, the foundation and basis of our system, must not be discouraged, but rather their sense of responsibility had to be increased. It had to be recognized that there were rivalries between individual towns, cities, and districts, and therefore growth in this direction to be healthy should likewise be spontaneous. The Board of Education were anxious to stimulate all local ambitions and interests in this direction, and would take any opportunity which might present itself for extending delegation of powers which could be better fulfilled by the local authority.—*The Hindu*.

EDUCATIONAL OUTLOOK.

THE OUTLOOK FOR REFORM.

Mr. Fisher, Minister of Education, addressed a meeting in Plymouth Guildhall on the educational outlook. The Hon. Mrs. Waldorf Astor presided, in the place of Mr. Astor, M.P., who was detained in London on official business.

Mr. Fisher said:—Is it not in itself a remarkable fact that, in the third year of this great exhausting war, at the very hour in which a critical battle is being waged by the biggest British Army which has ever been placed in the field, a large audience of men and women should be gathered together to consider the future of education? That is a fact full of brightest augury for the future. I do not claim that education is the most interesting subject in the world, but I do claim it is most important; and when I use the phrase "education" I am not merely thinking of learning from books, I am thinking of the whole moral, intellectual and physical development of our race. Efficiency depends upon the teacher, upon the managers of our schools, upon members of our local educational authorities, upon the Board at Whitehall, and all these various agencies must work in cordial co-operation as partners in a great patriotic enterprise.

THE RATEPAYERS' VIEW.

But behind these agencies there is a dark sinister figure. There is the figure of the British ratepayer, and I am told that the education rate is an unpopular rate. People accept the rate for gas and water as an inevitable though a disagreeable factor in a dismal scheme of Providence, but when it comes to the education rate their groans become audible. If this is so it speaks very ill for the intelligence of our community, and the primary duty of every good citizen is to convert the reluctant ratepayer to an intelligent view of his duties in respect of the education rate. After all, the country cannot afford to allow its children to grow up undeveloped in mind, body, and character. I hear people say, "Why should I pay for the education of somebody else's children? That is their affair, not mine." But is it not everybody's affair that the Army and Navy shall be efficient, that industry and agriculture shall flourish,

that crime and intemperance shall be diminished, that our men and women shall be brought up knowing the sanctity of civic duties, temperate in habit and possessing something of our previous heritage of culture; and how can any one of these great objects be obtained unless people are ready to spend money, and to spend money freely, upon the education of the great mass of the population, upon whose well-being the future strength and power of this country depend? Depend upon it that England will never realize the full measure of her human powers until the education rate becomes the most popular rate which can be imposed, and until the ratepayers insist, and vehemently insist, that the children who live in their locality shall have no worse an opportunity for obtaining education than the children who live in any other part of the country. There is no difference in kind between profound knowledge and superficial knowledge. We are all superficial. The knowledge of Cabinet Ministers is superficial; the knowledge of Oxford and Cambridge professors is superficial, and even the knowledge of the schoolmaster is superficial. If we are going to be deterred from giving education to the poor on the ground that it is superficial, by what right can we claim education for ourselves? Every little scrap of knowledge, however superficial, however it may be collected, like the food the birds pick up in the forest, is worth something. And in the fierce light of this war we know this to be so.

There is another argument which I have sometime heard addressed by gentlemen who do not favour our present scheme of education. I have heard it said that we are lessening the sense of parental responsibility. Now when a gentleman says that to me I at once begin to look out for a magistrate and for a doctor, in order that he may be certified for the nearest asylum. I can only find that this class of objector sends his sons to an expensive boarding school, and thereupon the following line of reflection occurs to me. I say to myself, "The child of the poor parent who goes to a public elementary school at least spends every night of the year at home. The child of the rich parent who goes to a public school is committed, lock, stock, and barrel, to the schoolmaster of an expensive boarding establish-

ment for a period of eight or nine years. Which of these two systems is most calculated to develop the sense of parental responsibility?" This class of objector generally omits to notice that children have the knack of growing up, and that if they grow up they are liable to become parents, and that in consequence there is a reasonable expectation that, if we desire to develop a sense of parental responsibility, it will be on the whole the cheaper and more effective plan to develop it in the children who are to be the parents of the future rather than in the parents who have grown up without having acquired that sense. Then there is the third objector. It used to be held—I do not think it is held so vigorously now, but it used to be held—that a system of public education was too good for the birth-rate; that if you took from the shoulders of parents the obligation of educating their children, then the country rapidly would become overpopulated. Well, that prophecy, which used to be indulged in constantly, is no longer heard, because unfortunately the birth-rate has been falling. But on the contrary, I am told that my scheme for extending popular education will check the birth-rate, because if I extend popular education I shall diminish the earning power of the child; the child will cease to be a lucrative proposition. Parents will no longer invest in them. They will be a falling security. Will you forgive me if I do not subscribe to this lugubrious vaticination? If you ask me what are the forces which are likely to injure the birth-rate, I say quite frankly, neglect of small children, the large number of deaths in child-birth, and the number of other preventable causes against which the school medical services are struggling.

VILLAGE SCHOOLS.

These objections to education are most freely heard in country districts. I have often been told that our system of education in the village schools of this country is bad. Well, if it is bad, by all means improve it. Do not let us despair of education in the country districts, because it has not realised all our ideals as yet. We have plenty of time to improve it, and it is quite obvious what the lines of improvement should be. I am very much interested myself in improvement of rural education; and, as I said to the House of Commons, I

think it is quite possible that we do not at the present moment make a sufficient differentiation between the education which we give to our country children and the education we give to our town children. My business is not to be satisfied with our existing system of education, but to be dissatisfied, and to point out ways in which it could be improved, while at the same time recognizing, as every President of the Board must recognize, the very great improvements which have been realized of recent years, and the splendid and devoted labours of the schoolmasters and schoolmistresses, who amidst much discouragement have been carrying on the great and patriotic work of education.

How are we to improve our rural education? Well, one great instrument of improvement is the school garden. Since I came to the Board I have been encouraging, so far as I can, the development of school garden in country schools, for the purpose not only of instruction in gardening, instruction in plant life, but also for the more practical purpose of enlisting the labour of school children in the production of food during this great national necessity. I lay special stress upon this because this movement has not been taken up as I hoped it would be in the county of Devon here. In some counties there has been, ever since the submarine menace became clearly evident, a very marked and satisfactory movement. Last November there were only 20 school gardens in the county of Durham; now there are 200. You in Devonshire have only 27, Somerset 26, and Cornwall 50. There is a field for improvement. I should like to see every village school with a school garden, in which children could be taught something about the elements of plant life, about the practical art of gardening, and be given an interest in the common sights and common sounds of the country. Then there is nature study in the class-room itself. This is part of our rural curriculum, and in some places this nature study lesson is given very well, and in other places it lacks interest and quality.

BETTER PAY.

But, after all, you will never seriously raise the level of our teaching either in our country schools or in our town schools until the country learns to

pay the teachers better. And not only to pay the teachers better, but the teacher must never be allowed to go to rust. I think that one of the serious defects of our educational system is that when we appoint a teacher, either in a town or in the country, we are apt to think that our responsibilities towards the teacher have apparently ceased; but it is quite as important that the teacher should continue to educate herself or himself as that he or she should continue to educate the children. For, depend upon it, as soon as the teacher winds up the living mind within him, his utility as a teacher begins to cease. And, after all, what greater waste of time could there be for any mortal child than to be condemned to spend an hour of sunshine in the room with a bad teacher? I say, then, keep the minds of your teachers alive, take them from time to time, especially the country teacher, to courses of instruction at agricultural colleges or University Extension centres, in order that their minds may be refreshed, and that they may come back to the school with new ideas. Then, again, it is a great mistake to suppose that, because a village school is small and remote, therefore it ought to be put off with a bad teacher. The teacher in a small village school is a very important person. The village teacher can often exert, I think I might almost say generally can exert, a deeper and more enduring influence upon his or her small circle of pupils than the teacher in the great crowded urban school. If, then, you want to get good teaching in the village, don't be afraid to get good teachers, qualified men and women; pay them a wage worthy their ability, and when you have got them keep their intellect alive. Napoleon used to say that a country priest ought to know three things: a little agriculture, a little law, and a little medicine, in order that he might be able to give useful advice to the peasantry. Now I say that a teacher in an English country village ought to know a little gardening, a little agriculture, a little mechanics, and a little political economy. I should like to see him able to talk about crops with the farmer upon equal terms; I should like to see him able to mend an agricultural machine and to know what was wrong with it, and I should like to see him also able to start a co-operative society and to know something about the co-operative movement.

I can assure the Plymouth and Devonport authority that everything which they do to promote secondary and elementary education in this great and interesting country borough will be received with great interest, I might almost say anxiety, by

the Board of Education. Then there is your famous laboratory of marine biology—one of the most brilliant institutions for specialized research which this country shows. And finally you have in your dockyard town a most interesting scheme of education continued throughout the period of adolescence, a scheme which I need hardly tell you I have studied with the greatest interest and with very great profit.

One of the great advantages of our localized system of education is that it enables the State to draw upon the services of capable and public men and women whose abilities might otherwise be lost to the community. What we want to effect is a system under which every boy or girl in a county or in a group of counties, however poor their parents may be, whatever their initial handicap may be, shall be enabled through a wise and careful organization of educational agencies to pass from the primary school to the secondary school; and if they are fit, from the secondary school to the University. We want a broad highway from the primary school to the University degree. We want more secondary schools, better-staffed secondary schools, fuller secondary schools, and the secondary schools so co-ordinated that no great subject of secondary education is left out of the general scheme.

THE RELIGIOUS CONTROVERSY.

You will observe I have said nothing about the issue which used to be very unpleasantly prominent when educational questions were discussed some years ago, about what is known as the denominational issue. The old controversy about religious instruction has been one of the great obstacles to educational progress. Now that the war has drawn in all more closely together, let us combine in a common onslaught on one of the greatest enemies of human progress—I mean ignorance. Don't suppose for a moment that I ignore the importance of the denominational question, but I see it in a different perspective. When I go into a school my irresistible tendency is to sympathize with the work I see going on in it. It may be a Roman Catholic school, it may be a Jewish school, I do not care. For me it is a school. I see there an honest attempt to hand down the torch of knowledge to young and tender minds. I see an honest attempt to introduce young children into the precious heritage of our past civilization and to imbue them with ordinary good habits of decent living. There may be much in the

instruction given in the first hour of the day from which I dissent but my desire to dissent or criticize is overpowered by my sympathy. And this I believe to be the attitude of every true educationalist, and I believe it to be the attitude which will become diffused all through this country as one of the happier results of the great common trial which has afflicted us all.—*The Hindu*.

Reviews and Notices.

A REFORMED METHOD OF TEACHING ENGLISH, BEING A PRACTICAL EXPOSITION OF THE DIRECT METHOD FOR TEACHING ENGLISH, AS USED IN AN INDIAN HIGH SCHOOL, BY E. STOKES, I.E.S., HEADMASTER, GOVERNMENT HIGH SCHOOL, BAREILLY, UNITED PROVINCES. (LONGMANS GREEN & Co., 1917).

The teaching of no other subject presents so many problems to solve and so many difficulties to overcome as the teaching of a foreign language. English is being taught in Indian schools for the last half a century and more, though not always on the most educative lines. The time-honoured translation method, as it is called, has had its day, and is now being replaced by a new method which has been variously termed as the "Reformed Method" or the "Direct Method" of Teaching English.

The volume before us is offered to teachers as containing a suggestive outline of work which has been actually tried and found successful. It is the outcome of the author's actual experience in an Indian school and as such it cannot but be found eminently interesting and highly suggestive. Mr. Stokes has not ignored the difficulties in the way of Indian students learning English and in many cases he has practical suggestions to make. We entirely agree with him when he says that it is most necessary to revise our method of teaching English so as to bring out the culture value of its literature. We are also at one with him in detesting patched-up prose and verse going under the name of "Readers." "The old method," he writes, "is to take a so-called 'Reader' or 'Text-book' and to hammer out its meaning, phrase by phrase, word by word, during the course of a year and sometimes even of two years. These Readers are usually composed of fragments of stories and extracts culled from complete works and are interspersed with a few poems which are frequently unsuitable for Indian children. Thus the desired end in teaching English as a living language is lost: it can never be regained. The student's soul and literary taste, however small

that may be, are killed by the deadening methods of his teachers. There is no life, no vigour, no interest, but simply a dull routine of cramming up words and phrases, having little practical meaning or value."

Mr. Stokes suggests that in both prose and poetry "complete books" should replace the "Readers" that are generally being used. He points out how children are likely to be more interested in a finished piece of prose or poetry than in a haphazard collection or medley, and how with a little trouble suitable "complete books" can be had. He thinks that the "Readers" after all have not the monopoly of graded difficulties and that what is most essential in teaching is to create an interest in what is taught and a further desire to enter into "those realms of gold."

Coming to the "Direct method," Mr. Stokes is careful not to forget, as many advocates generally do, the advantages that result from using translation under prescribed limits. Translation is an art the beginnings of which should be laid even when the child is young. It is not, of course, meant that there should be a word for word translation, but the ability to render in one's own vernacular a train of ideas expressed in a foreign language, or *vice versa*, should be carefully cultivated, for we have to remember that it was the art of translation so sedulously cultivated in these days that partly made up for the various deficiencies in the methods adopted in teaching.

Mr. Stokes has also a very useful suggestion to offer with regard to the medium of instruction in non-language subjects. Any one who has had some experience of teaching English cannot but come to the conclusion to which Mr. Stokes has arrived, that, in the school classes at any rate, the work of the English teacher is partly undone by trying to teach other subjects in English. It does not in all cases imply that the teachers in those other subjects are necessarily ill-equipped for imparting instruction through the medium of English, but from the nature of the work they cannot reasonably be expected to devote as much time to expression as they do to ideas. In the case of most students in the lower classes explanations in English serve but to display the teacher's vocabulary or command of words, but so far as the student is concerned bewilderment is the only result.

In one point, however, we have to part from such good company. We certainly do not agree with Mr. Stokes when he says that he does not consider Phonetic sounds and Phonetic spelling as a practical necessity—"especially so in India."

The Educational Review.

It is a matter for regret that almost every educational question in India is coming to be judged from the political standpoint and measures intended purely to advance educational efficiency are often greeted with unwholesome suspicion. We cannot otherwise account for the adverse attitude shown in some quarters, to the recent order* of the Government of Madras introducing the Tutorial System in Government Colleges. It is a very well-recognised principle of education that a special feature of University life must be the intimate association of Professor and student and the greater the touch, the more fruitful are the results in a University. Much of the success of the Universities of Oxford and Cambridge is due to the individual care and attention shown to students by the organisation of an elaborate system of tutors. It is not merely that the student has thereby the opportunity of enjoying increased facilities for intellectual improvement, but that there is an ennobling influence exercised upon him by this constant association with an elder, to whose intellect and character he can always look up with affection and reverence. We cordially approve of the principles of the Government Order and join in the hope that "the members of college staffs will co-operate in making it a success and welcome the opportunities which it will

* Reproduced elsewhere in this issue.

give to mould and influence in the right direction the characters and dispositions of those placed under their immediate care." We also hope that the University of Madras will take steps at an early date to insist on the introduction of the system into all the affiliated colleges.

It is a matter for congratulation to everybody concerned that the teaching profession in Southern India was not forgotten on the recent occasion of the Birthday of His Majesty, when the usual Birthday Honours list was issued. Professor K. B. Ramanathan, the distinguished Professor of English at Pachaiyappa's College, who is deservedly held in high esteem for his learning and character, becomes a Rao Bahadur and it will suggest itself to everybody that the honour is one which has long been overdue. He has a very long record of useful educational work, as Professor and as Fellow of the University of Madras and he has in addition played a non-important part in the organisation and work of the Teachers' Guild and the South India Teachers' Association in Madras. Simple and unostentatious in private life, he is a remarkable example of plain living and high thinking and combines in himself an ascetic sobriety of life with strenuous intellectual work. The late Principal I. Srinivasa Iyer whose sad demise we chronicled in the last issue of this journal was another recipient of this honour, but he was unfortunately not destined to receive it. It must however be some

Educational Honours.

satisfaction to those who have cherished his name with regard. Professor S. Krishnaswami Iyengar, the distinguished Professor of Indian History and Archaeology in the Madras University, who held the place of Professor of History and English in the Central College, Bangalore, for several years, with credit, is the recipient of the mock title of Rao Saheb. Perhaps it would have been better if he had been left alone. We trust that the Local Government will strive in future to make the inclusion of educational names a necessary aspect of the annual Honours list.

The work of the Right Hon. Mr. Fisher as Member for Education in England has started with what promises to become a recognised landmark in English Educational History. The Budget he has just brought before the House of Commons for its consideration is a triumph of broad statesmanship, based on intimate expert knowledge. In the middle of the most taxing war in which England, or any country of the world, has ever fought, he has had no hesitation in introducing proposals which are to result in an increased expenditure of £3,829,048, and it was a telling plea that he put forward in justification. "When we are considering," he said, "a form of productive expenditure which is not only an investment, but an insurance, the question cannot stand alone. We must ask not only whether we can afford to spend the

money, but whether we can afford not to spend the money." To those critics who would be apt to question whether the country should spend such a large sum as £40,000,000,—for that is the total amount—on education in a year, he had an answer which carried conviction with tremendous force. He said that it should be taken in the general context of national expenditure. It was eight times the value of England's importation of oranges and bananas. It was four times the value of the estimated saving of the country through the partial substitution of margarine for butter; it was one and one-third times the value of the annual expenditure on tobacco, and it was almost one-fourth the value of the total expenditure on alcohol, a statement which was received with applause and laughter. The increased expenditure is intended to improve elementary education, add to the usefulness of secondary schools by opening branches of activity which will train people for the realities of life and not merely for the class-room, and what according to Mr. Fisher is most important, to increase the salaries of teachers. "The first condition of educational advance," according to him, "is that we should learn to pay our teachers better, and the only certain way of securing that any extra money available for elementary or secondary education should go into the pockets of the teacher is for the State to pay the teachers direct." We commend the remark to the Government and the publicists in this country.

who are generally content with demanding self-sacrifice from the poor and hard-worked Indian teacher. Mr. Fisher also foreshadowed some reforms which he has contemplated for the years to come—the ample provision for the prosecution of free and independent post-graduate research, for scholarships for Science, Technology and what may be called modern subjects; the development of country schools in such a way as to create a taste for country life and interest in all the common sights and scenes of the countryside and an intelligent use of its various opportunities; and another important matter, the care of adolescents. We have no hesitation in saying that Mr. Fisher carries with him, in these highly beneficent intentions of reform, the best wishes and cordial approval of the most enlightened educational opinion, not only in England, but in all the Empire. When is India to have glimpses of such an age of reform?

We welcome the news that His Highness the Nizam of Hyderabad has issued orders to consider the establishment of a University for the State. The vast extent of the Nizam's dominions and the rather backward condition in which education is in them, render such increased attention to higher education highly desirable and necessary and we are glad the step has been taken. Though the resources of the State are very rich, and there already valuable facilities for primary,

secondary and collegiate education, the progress that has been attained till now is very poor and discouraging. Side by side with the organisation of a University to suit the special needs of the State, vigorous efforts will have to be made to induce the people to take advantage of the new facilities. There will otherwise be the pathetic spectacle of the huge institution of a University, containing a ridiculously small number of undergraduates, a number which would be considered too small even for a single decent college. It will interest those who have been demanding that even higher education in India should be imparted through the medium of vernaculars to know that H. H. the Nizam has ordered that the education in the University should be through the medium of Urdu, though English should be a compulsory second language. As Urdu is already the official language of the State, and as it is also the language employed in the Law Courts, very little difficulty will be experienced on the score of the medium. In Mr. A. Hydari, the Nizam has an able, energetic and enlightened Secretary for Education and we have no doubt the scheme will see proper fruition under his auspices.

At the last meeting of the local Legislative Council, the Hon. Mr. B. Venkatapathi Raju moved a resolution bearing on the S. S. L. C. Board in the words: "This Council recommends to the Governor in

Council that the Secondary School Leaving Certificate Board be constituted so as to consist of an equal number of Head Masters of High Schools and Lecturers in Colleges and as many Government educationists as the Government deems fit, to improve the system of education imparted to the High School students and to better regulate the School Leaving Certificate Examination." We do not propose entering into the details of the exact composition of the Committee as suggested by the Honourable Member and we repeat our old complaint about vague proposals though they may be the outcome of the most pious and benevolent intentions. But there was undoubtedly a strong point in the Resolution, that there should be a greater representation of Head Masters of High Schools on the Board. Even that however did not appeal to Government and the Hon'ble Mr. Stone disposed off the request with the remark that Messrs. R. Venkatratnam, P. V. Seshu Iyer and Mark Hunter were not out of touch with students. We are afraid the answer is not very logical and we hope that an early opportunity will be taken to redress this legitimate grievance, which is also bound to affect the efficiency of the Board in the purpose for which it is intended. We have wondered why this has not been done earlier—probably because of the patrician exclusiveness fostered by bureaucraes. On the Hon. Mr. Stone's promise to consult Head Masters if any change of grouping of subjects in the S. S. L. C. was desirable,

the Hon'ble Mr. Venkatapathi Raju withdrew the other Resolution that stood against his name.

The Mysore University has entered upon further schemes for the expansion of its facilities by resolving upon the establishment of Faculties of Medicine and Engineering and also by the adoption of courses in Commerce. While we rejoice at this early multiplication of University activities, we feel it our bounden duty to express the warning that the University should not embark upon ventures too numerous to be maintained in efficiency within the resources of the State, and what is more to the point, within the amount set apart for the purpose. We cannot presume to have studied every detail of the financial aspects of the scheme, but from what we have seen in the papers, we have formed the impression—we write subject to correction—that the conditions do not seem to guarantee the creation of efficient Faculties of Engineering and Medicine. It is doubtful if the education proposed to be imparted in the two Faculties will be anywhere near the conditions obtaining in Madras and Bombay, for instance, where the young men of the State now obtain instruction in the subjects, with of course necessary limitations of number in admission. In the early stages of a new University, the temptation is great for starting schemes which arrest the imagination and impress the outside

of prominent and influential men from different communities and different wards. With such safeguards we have no doubt that compulsion will cease to be unpalatable and we hope that at least Municipalities and Corporations in India will not hesitate making a beginning in the direction. The scheme may be read in its entirety in the April number of the *Social Service Quarterly* of Bombay.

The evils of juvenile smoking require to be widely recognised and severely corrected and we wonder why more vigorous attempts have not been made in India, by legislation and educational discipline to stamp out the pernicious habit. Mr. F. C. Turner, the Assistant Director of Public Instruction, Bengal, has very wisely addressed to Inspectors and heads of schools a circular drawing their attention to the fact that the habit of smoking cigarettes in schools and colleges in Bengal is on the increase. Mr. Turner demands that steps should be taken to check the growth of the habit in view of the permanent injury to the constitution that may result from acquiring it at an early age. Head Masters are requested to forbid the sale of cigarettes on school premises,

to suppress smoking on those premises, to hold informal talks on the evil effects of smoking on the constitution of the young, and finally to set a good example by not themselves smoking before their pupils. The habit is not probably so widely prevalent among the students of Southern India as in Bengal, but we have ample evidence that it is on the increase, and this is a matter that deserves the immediate attention of the educational authorities. Separate statistics are not available for juvenile smoking, but an idea of the scale on which the production of cigarettes in India is going on may be gathered from the circumstance, that in a single factory of Bihar, while the manufacture of the commodity was less than thirty-five tons in 1904-5, it was more than 4,516 tons in 1915-1916, representing a total of 1,759 million cigarettes. So early as in 1910, Sir James Meston drew attention to the evil in the Imperial Council, in the words: "The flood of cheap cigarettes and tobacco which is pouring into India is bound to have its effect upon the public health of the people, and more particularly on the health of the young." The fears have been more than justified and it is time that some drastic action were taken all over India.

The Educational Review

A Monthly Record for India.

VOL. XXIII.

JULY 1917.

No. 7.

All literary contributions, books for reviews, newspapers or magazines, sent in exchange, &c., should be addressed to the Editor, No. 4, Mount Road, Madras. Articles and communications intended for publication in the succeeding issue should, as far as possible, reach the Editor not later than the 20th of the month. The Editor solicits contributions on all subjects of educational interest. Stamps should accompany the MS., if the writer wishes it returned, in case of non-acceptance. The Editor can in no case hold himself responsible for accidental loss.

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THE FUNCTION OF THE STORY.*

OF all means and devices for instruction, there is none that can claim more classical origin or more sacred history than The Story. From time immemorial, the agent has been used in the training of the citizen and in the teaching not only of children but of men. "And He Spake Many Things To Them In Parables," is repeatedly recorded of the Great Teacher, who, in His sublime educational work among a people in the childhood of moral enlightenment, used the story as His great means of touching mind and heart. As in race development, so in that of the individual, there is a time when the mind cannot grasp precepts and logic, but can understand the truth when conveyed in story.

I am using the word "Story" broadly here, and include under it folk and fairy lore, legend, fable, parable, myth, biographical, historical and scientific narrative, and fanciful tales of various sorts. While the immediate purpose seen in these may vary, some serving best to stimulate and cultivate the imagination, some to prepare

for the appreciation of literature, and others to impart historical or scientific knowledge, yet the ultimate purpose in the use of them is the same for all. This is not the imparting of facts, or the instilling of culture elements, or the stimulation of fancies for their own sakes alone, although these are important ends to be attained; but, superseding these in importance, there should be the purpose to build character through the instrumentality of the story—to make it conduce to strength with the culture.

Such I conceive to be the chief function of the story in education. In this paper, I will make it my aim simply to answer the three practical questions at once suggested:

(i) What stories should be selected and why?

(ii) What are the needs of children as manifested by interest.

(iii) How can the story be used as a school exercise.

The difficulties involved in the first question arise not from scarcity, but from superabundance—the embarrassment of story riches. The child of to-day, among other characteristics of environment that distinguish his age from that of his

* A lecture delivered by Miss Corrie Gordon, Teachers' College, Saidapet, at the Madras Women Teachers' Union.

ancestors, finds himself in a paradise of books especially prepared for him. Many of these books are products of the very best literary and scholastic talent. For example, he has been placed in possession of the rich inheritance from the remote past, through Hawthorn's delightful versions of those classic myths that helped to shape the lives of Hellenic youths. Folklore and legend have been gleaned and put in attractive form for him by those profound scholars, the Grimm Brothers. From Denmark rises up for him a matchless story-teller. From England the great art-critic Ruskin, and the novelists, Kingsley, Mulock, and Ouida send him their valuable offerings. Kipling, Seton, Long and Roberts, translate for him in fascinating style. The stories told by his speechless brothers of air, field and wind; and many others, hardly less notable, have contributed to this wealth of literature for children.

Besides these valuable contributions, many doubtful ones have crept into the child's Library, so that those upon whom the duty of making the selection devolves need to exercise thoughtful judgment. Even among the classic productions can be distinguished the good and the bad, for age is not necessarily a guarantee that the story is in all ways suited to our purposes; neither is the rank or sincerity of motive of the author always a passport to admission without examination. From the very first nursery stories, as much care should be used in their selection as in the choice of companions—I will say *other companions*, for in the realm of fancy in which the young child lives, the imaginary beings of his stories assume a reality approaching that of the beings of his realm of sense.

Would it not be helpful to establish a standard by which to measure a story as to its suitability for children? A German writer Wilmann, whose works I have not read, but whom I find quoted in books of pedagogy, has furnished us such a

standard, the points of which I will give, with my interpretation of their meaning:

(i) It must be childlike; that is, it must be simple so that the child can readily understand it, and it must possess that other childlike quality fancy, for without this it will not interest children. Some one has said, "The poetic forms of truth are more stimulating at all ages than the prosaic".

(ii) The story must influence morally. This does not mean that the moral must be attached in capital letters at the end, or be in illuminated letters at the beginning, but that it must somehow afford, through its persons and incidents, an opportunity to call out from the child a moral judgment of approval or disapproval.

(iii) It must be instructive; that is, it must furnish or suggest some truth in regard to nature or man.

(iv) It should have literary merit and permanent classic qualities. Such stories invite repetition and are thus distinguished from the trivial things which please for the moment only. Children should early form a close acquaintance with stirring things in literature, so that they may detect the counterfeit.

(v) It must have considerable length and be a connected whole, hence possessing the power to work a deeper influence and suggest many associated interests.

The last, I think, might be disregarded if the others are found. Its purpose seems to be to shut out fragmentary and anecdotal matter and secure that which has unity and finish as a literary composition.

Having set up the positive standard, it may be well to emphasise some qualities which a story for children should not have. To do this I will quote from Sara E. Wiltse who has prepared editions of such carefully selected stories from the Grimm collection, and has shown such excellent taste and judgment in her revision of certain

classic tales that her words should have the weight of acknowledged authority. She says:

"If we find that any story produces fear in a child to any great degree; if we find a story, I care not who invented it, or how long it has been preserved in folklore or in print, that tends to weaken personal responsibility for one's own acts; if we know a story that tends to give false notions of life, like a belief that we may be idle or tricky, and some well-disposed fairy will aid the lazy and shield the trickster; if we have a story of an angelic child that is oppressed and down-trodden by a step-mother who represents all feminine vices, I am convinced that we have no right to use such stories for any purpose whatever in our training of children."

Since the child's love for stories begins before he enters the regular school, parents have a clearly indicated duty to perform, which later, the Kindergarten assumes.

While it is eminently necessary, in the selection of good stories for children, that we be guided by some such standard as I have here set before you, I think it a great mistake if we do not also study the child's interest, and start at least, from that, rather than from what we think he ought to be interested in. Doing so, we are at the very outset compelled to acknowledge the importance of the Mother Goose Rhymes, which three-year-olds love to repeat. The universal love which children entertain for these familiar compositions is proof that while they may not conform in all respects to the standard previously described they answer some need of the child. They certainly fulfil the conditions regarding classic value. Mother Goose is folklore and like Homer belongs to that class of literature which is so old as to have become anonymous, yet too precious to be forgotten. Though the home is usually the place where Mother Goose Rhymes are taught, still we have but to examine first readers to see that some people regard this literature as proper school material. Children are very appreciative of the

grotesque and absurd, as they are of the fanciful, and where it can be found devoid of vulgarity as in the book named above, it has its use in contributing to their natural joyousness and delight.

Continuing our study of children's interests, we find that after Mother Goose come the folklore tales such as the Three Bears, Tom Thumb, the Three Musicians and other commonly known ones. These too are taught in the home. Here an opportunity is offered for parents and teachers to use our standard of selection, for all these stories are not equally good, and for many of them a revised version should be used, as of Jack and his Bean Stalk and Red Riding Hood.

The charm of these tales is not to us grown folks quite so difficult to analyze as is the charm of Mother Goose. We find that the stories of this class that children love best are characterised by simplicity, directness of style, and strength of plot, and for subject involve what some one has called freemasonry with animals.

At this stage, fables share with folklore the child's love. The chief purpose of the fable is moral, but, as in other stories, the moral truth involved is best felt, not in the formulated conclusion, but in the acts of the characters represented. Fables differ from the folklore stories named, in that while the lion, the mouse, the fox, the dog, portrayed are true to nature to a limited extent, there is very little of the animal and very much of the moral. The purpose of early acquainting a child with the classic fables is the effect coming from the ethical judgments called forth. The truths thus set forth in concrete form make a lasting impression, and find their application later on in a wide field of human experience. Parents who have acquainted their children with the best of the fables find them an ever ready means for turning the child's attention upon his own acts, and making him "see himself as others see him." The fable often furnishes children with names for motives recognised, but beyond their powers of description, as is illustrated by the

exclamation of the kindergarten child who said to a little companion "sour grapes" with nice appreciation of its application.

Next to animals endowed with the power of speech and human motives comes the fairy as a claimant upon the child's fancy. The fairy tale, like other forms of folklore "has lived by tradition and has its groundwork in history." The most notable modern contribution to this class was made by the Grimm Brothers of Germany, who collected the tales of their native land as they were told in traditional form by old grandams. But these stories cannot be taken indiscriminately; some are really harmful, and children ought to be protected from their bad influence; others have a most beautiful and elevating effect, and these should be used.

The early part of the century produced another writer, who, as Scudder says, "created forms of literature consciously, which are very closely allied to the stories which have rolled over and over in the minds of people, until, acquiring a certain consistency and soundness, they have lost all individuality and authorship". He refers to the fairy stories of Hans Christian Anderson, whose delightful tales, so humorous, fanciful, and simple, have earned for him the high title of "Children's Friend." Anderson is not a compiler, but an author. His stories are the product of a man's warm, childlike heart, and sensitive fertile mind; and while lessons flow from them "the spring is not in the didactic, but in the imaginative."

I will now try to answer my second question: "What are the needs of the children?"

"By many teachers," says McMurry, "fairy stories have been adopted as best suited to the wants of children just emerging from the home." Dr. Stanley Hall thinks that the age at which the fairy stories exert the greatest moral influence is six years. The parents and teachers or any other close observer of little children, will appreciate these beautiful words of Wilmann (I use one of Charles McMurry's quotations from the

author). He says, "When we look into the trusting eyes of a child in which none of the world's deceit is to be read as yet; when we see how these eyes brighten and gleam at a beautiful fairy tale, as if they were looking out into a great wide beautiful wonderland, then, we feel something of the deep connection of the fairy story with the childish soul." But, true as this may seem to us, we know that there are some, at least, who do not believe it: Parents sometimes argue that fairy stories mislead children by falsifying the real truth of things. We admit, of course, that these stories are not always observant of natural laws, which sensible grown-up people always respect, but what of that? The fairy story and the child's soul naturally understand each other. Take away the story, and the little girl still continues to talk to her doll, and to enjoy with her brother marvellous trips round the world upon the magic train, made of chairs, having for company the imagined presence of uncles, aunts, grand-parents or cousins, who never forget to exclaim with delight as the different stations are called out in this very wonderful and very erratic tour. Are these children a whit the worse for this? Their spontaneous delights are in this exercise of fancy, and one need never fear for a moment, any more when the child is absorbed in the fairy story, than when he is managing his "wonderful train," that he is not master of his imagination, and that he will not soon enough emerge from this state of development and live all too much, alas! in the realm of grey realities. When that time comes it will be found that although the childish joy in fairy tales has passed away, not so the inner experiences which it produced. It is he whose child life has been dry and barren of the fanciful, who does not possess that wherewith to appreciate and enjoy the beautiful in poetry.

Do not understand that I advocate an exclusive diet of fairy stories as the literary part of the course for children. There is place here

for folklore, fable, animal stories and poems. The teacher may say "How can I get time for all this when there is reading and writing and spelling and numbers and language that must be attended to. There are so many wheels now in the primary mechanism that I want no further complication." My reply is, "Make the story at times the main-spring of your mechanism, lubricate its wheels with the interest thus produced, and though the machine will hardly run itself, you will have to use far less personal force in keeping it going. Let me enumerate some of the lines of school work the story will help:—

(i) Reading may grow out of it; the children's expression of the thought of the familiar story written upon the blackboard in a fluent, large, round hand by the teacher, stimulating their efforts to master the written symbols of language.

(ii) Children are encouraged to draw the objects and scenes in which the story abounds. These drawings are often crude and uncouth, but still they often surprise one with their truth and suggestiveness.

(iii) Much incidental information can be brought in, concerning the animals and plants that are actors in the scenes.

(iv) The oral reproduction of the stories gives language drill and at the same time makes the story more dear through greater familiarity. This end is also furthered by a fifth kind of exercise namely dramatisation of the story.

I have repeatedly seen all lines of work in a kindergarten centre for a time in the story then being set forth by the teacher. I would not however advise an unskilled teacher to undertake quite so much, but any one may easily correlate some one at least of the other school activities with the story work.

The childish joy in the fairy tale begins to wane in middle or later primary days and new interests arise which the teacher must study and meet. In the Second Standard, Robinson Crusoe, Seven Little Sisters, and certain of the Ernest

Seton Stories may be used. This course might be seasoned with 'a dash' of Uncle Remus and his ubiquitous Brother Rabbit and Brother Fox. Perhaps pupils here would not object to some more fairy stories, but, of modern date, as Carroll's "Alice in Wonderland" the charm of which seems to be in its truthfulness to the child's imaginings and its sympathy with animal life.

In the third standard, if not before, children should be introduced to the mythical stories and many of them should be taught. It will not be necessary to use your standard of selection as often with the myth, as in finding suitable fairy and folklore stories; for most of the old Greek and Roman myths, and many of those from the Norse will answer everyone of the five questions as to fitness, with promptness and in no doubtful tone. "Myth came," says Parker, "from the imperfect answer which nature gives to the soul of man." Myth is the beginning of History.

The European classic myths take the child into the presence of the men who best represent to us the nations of the old world in their vigorous pre-historic youth and illustrate to him the virtues respected in all times. Baucis and Philemon set him an example of perfect hospitality; Bellerophon that of bravery and self-forgetfulness in the cause of the distressed; Siegfried that of indomitable perseverance; Odin that of rugged strength. But not only in all these does the child live in the company of heroes, whose deeds of enterprise and manliness are the climax of every tale, but he is getting the means whereby he may better appreciate literature.

After the mythical hero the interest of the boys and girls pass to the real hero and heroine, and then the story phase of authentic history and biography should receive attention in the school course.

I cannot forbear emphasising one more class of story material, viz., the animal stories of Ernest Seton. With the life and adventures of "Reddy Fox"

a good frictionless pulley, and two similar ring-clamps. Fix the iron rod vertically at a distance of about two inches from a wall, the lower end of the rod being inserted into a block of wood fixed to the floor and the upper end into a block fixed to the wall at the required height. Fix the pulley to the block on the wall at a convenient horizontal distance from the upper end of the rod, the distance being determined by the dimensions of the pulley and the ring-clamps. Fix two metre-scales behind or by the side of the rod to cover its length. Firmly block the hole of one of the ring-clamps with a circular plank of wood cut to the size of the ring. This will serve as the platform and the unmanipulated ring will catch the rider.

The riders required may be manufactured from a copper plate. Cut out a small rectangular plate, the length of the plate being half an inch or so greater than the diameter of the ring. The breadth of the plate must be decided by the weight of the rider required. Cut off a portion from the middle of one length-side of the plate so as to leave a gap. The plate may now be weighed and

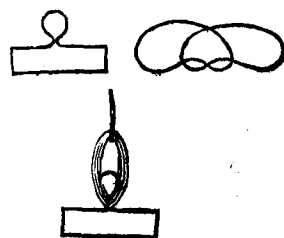


(FIG. 2)

filed off so as to reduce its weight to the required value. A convenient weight will be ten grams. Three or four such riders may be easily made.

For the equal masses required for the Atwood's Machine we may take from a weights-box two pieces each weighing 100 grams, and another pair each weighing 200 grams. When tying the string to the masses, care must be taken that they do not hang in inclined positions. A device must here be adopted which is often used in tying a string

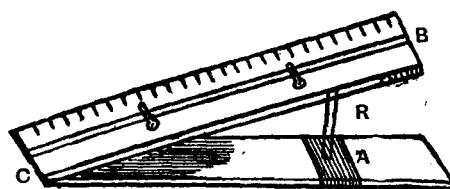
to a vessel to be carried full of some liquid.



(FIG. 3)

With this simple apparatus I have found my students getting excellent results in finding the value of 'g,' in verifying Newton's Second Law of Motion, and in proving the three formulæ for accelerated motion in a straight line.

We shall next consider the apparatus for proving Boyle's Law. The ordinary form of Boyle's Law tube requires much mercury which is very costly now-a-days. Therefore a tube which encloses a column of air between its closed end and a column of mercury may be used. The method of constructing and using the tube is perhaps too well known to need description. But for placing the tube at various angles a convenient arrangement may be



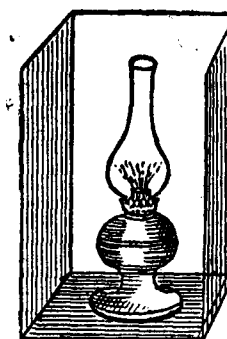
(FIG. 4.)

made. A and B are two planks of wood connected by a hinge at C. R is a slider which can be moved along B so that the angle between A and B may be varied. On the inner side of A small nails may be driven so as to provide resting places for the upper end of R. The tube may be put into a groove made on the upper side of A and a scale may be fixed by the side of the groove

to measure lengths of the air-column and the mercury-column.

The manufacture of apparatus required for verifying the parallelogram of forces and the tangent law presents no difficulty. We have simply to fix three pulleys, two above and one sideways, to a drawing-board fixed to a wooden frame in the vertical plane. The sideways pulley will be useful in verifying the tangent law. Another apparatus for the parallelogram of forces may be constructed by screwing three hooks to a drawing-board. Three spring balances are of course necessary here.

Much expense may be saved by constructing heavy wooden apparatus such as magnetometers (without needle and circular scale), optical benches, Wheatstone's bridges, etc. I do not think that their construction will present any difficulty. In addition we may also construct screens for receiving images, lens stands, wire-gauze screens and photometers. A convenient wire-gauze screen is represented in the following figure.

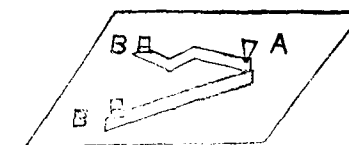


(FIG. 5.)

Keys and commutators required for electrical experiments are easily constructed, provided binding screws are available. A press key or tap key may be made of two strips of copper plate fixed to a wooden board by

XXIII

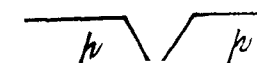
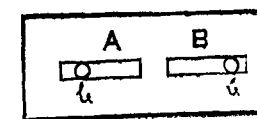
binding screws as in the following figure. B, B are binding screws.



(FIG. 6)

A is a wooden knob fixed to the upper plate by means of a nail which does not quite reach the top.

A plug key may be made as follows. Two rectangular rods of wood A and B are fixed to a wooden board with a tapering gap intervening between the rods. Two pieces of



(FIG. 7.)

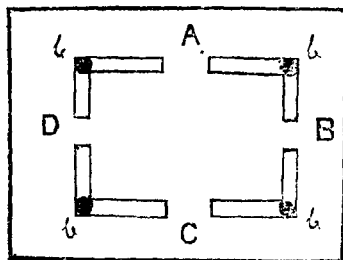
copper plate *p, p* are made, each piece being shaped to cover the upper surface and the surface facing the gap of each wooden rod. These plates are then placed over the rods and screwed to them at the ends by means of binding screws. A plug is then made with a knob or handle at the top and a lower portion



(FIG. 8.)

just fitting into the gap already made in the board. Then the surfaces of the plug which touch the two surfaces of the rods facing the gap are covered by a continuous piece of copper plate which is fixed to the plug by means of a screw nail at the bottom.

Plug commutators may be made on the same principle. A diagram of one is given below. A, B, C, D are the gaps and b, b, b, b



(FIG. 9.)

the binding screws. The surfaces must be covered with metallic plates as before. There must of course be two plugs in this case.

T. V. VENKATACHARI.

In Active Preparation.

COLLEGE ALGEBRA

*A Text-book for the Intermediate and
B.A. Classes*

BY

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Srinivasa Varadachari & Co., Madras.

THE TRAINING OF TEACHERS.

WITHIN recent times the public concern for the betterment and improvement of the quality and the status of the teacher has amounted to a fashion. Much stress has been laid on the training of teachers and a state of conditions when all the teachers in all schools will have received a regular training is generally looked upon as an adorable ideal. As has been suggested by the Editor of "Indian Education," few realise how important and difficult this work of training teachers is so as to accelerate the speed and quality of the education in this country. Education seems to present a twofold problem—that of spreading it and that of perfecting it. Each of these two aspects seems to act on the other. Education is not perfected till it is sufficiently spread and it does not take firm root in a country before it is sufficiently perfected. Towards the progress of each of these aspects a different set of people are specially needed. Towards the spread of education the lay public are competent to strive but towards the perfecting of education we need the work of liberal educationists who are also experts. The perfecting of the quality of education is perhaps even the most vital problem of education.

How are teachers to be trained, or rather how are teachers to be made? Professor A. C. Benson said only very recently that the theory of education was the dullest imaginable thing while the practice of education was the most interesting. Yet, the theory of education has been offered to the teachers in this country in such dull form that it will even bear stating that many a trained teacher has a dull load of heaviness upon him affecting his capacity to teach. Now is there any meaning in calling a teacher "trained" simply because he has acquired a mass of ill-digested pedagogic theory?

That a teacher is born and not made is an obstinate truth which however is frequently ignored in practice. Such influences as can draw out

and improve the dormant genius of men to teach should obviously be of a very subtle character. Professor Benson points out that education is not an abstract scientific process but a contact of living minds. Pedagogic institutions need to possess the best of teachers. They should connect their theory closely to their actual work of teaching. On the part of teachers to be trained there is nothing like well-regulated experience to profit them. Of late the working of pedagogic institutions has tended to minimise the amount of experience available for the teacher-pupils. The matter is one of considerable practical difficulty to arrange and herein lies an essential weakness in the idea of training institutions for teachers. It may be useful to remember that towards improving the quality of our teachers other methods than that of training institutions are desirable. If we could have a kind of teaching inspectorate that will actively go about to correct and improve the teachers in schools constantly while they are actually teaching in their own schools, we will have effected a sound scheme of improving the quality of our teachers.

To grant degrees in teaching on an exclusively written test seems absurd and yet a few years ago a Practical Test involved before the granting of the Teaching degree has been totally abolished during recent years.

It has been said that the three essentials of teaching are knowledge, method, and personality. The practice of pedagogic institutions has generally emphasised the second and it will be seen how much this will have to be at the expense of the other two. It is a poor compliment to the profession of teaching to presume that pedagogic institutions can turn out numbers of "trained" teachers year by year even as articles for "the Army and Navy Stores" might be manufactured. A year at the pedagogic institution is for the teacher under training a stop in his pursuit of knowledge-acquisition during the time which has the further effect of instituting a bad habit

for the future of the teacher. The "personality" aspect of the teacher is purely to depend on the kind and amount of responsibilities with which the teacher is entrusted. Here again, the best method will seem to be one of attending to the improvement of the teacher while working in his own institution.

Much stress has been laid on the proper framing of the curricula of studies for schools. Even in this, the comparative unimportance of it will be evident. As Professor Benson points out, the worst teacher is unaffected by the best curricula and the best teacher survives gloriously the worst curricula.

What we really want is a set of able, intelligent, self-relying and self-respecting men of good character to be our teachers. The lay enthusiasm for the betterment of the status of the teacher is indiscriminating. It may vote out of generosity a few more rupees to be paid to his monthly wage or it may try to hire more men to be teachers than before, but that will never solve the problem of education. We want a keen body of opinion among educationists themselves. They must get to live beyond the formal and wooden rules of pedagogy and pedagogic institutions and pay recognition to the intensely human character of the teaching profession. The genius to teach is genius inborn and where it is available it has to be availed of to full advantage. In manning pedagogic institutions the search for the genius has got to be keen. Dull seniority is a source of much harm.

To elevate the quality of teachers there is the extraneous measure of increasing the emoluments of the profession so as to attract the best intellects, but the purely pedagogic considerations are of vital importance.

P. R. KRISHNASWAMI.

POST-WAR EDUCATIONAL REFORM.

"PERHAPS one of the most beneficial consequences of the war has been a growing recognition by people of all ranks and classes of the vital importance of a well-planned system of education to national strength and welfare. Most significant of this widespread awakening to the urgent needs of education in all its varied aspects is the demand of both the labour and commercial and manufacturing interests not only for a higher standard of commercial and industrial training but also a higher level of general education." *

Now, most of the professions in India are hereditary and the methods followed in these professions are also hereditary, rule of thumb, and laborious unscientific methods. Just as a crow of to-day builds her nest in the self-same pattern as her ancestors of the antediluvian period did, so also, the carpenter, the weaver, the dyer, and the agriculturist of to-day, in India, knows no better method than the one which his ancestor of the same profession practised in the pre-historic period. "A comparison of the rule of thumb methods that pervade the dying crafts of India with the exact systems pursued in Europe leaves no room for doubt that in every direction the native dyer (ignorant of a knowledge of science) is far behind his western rival. The ignorance that exists in India regarding mordants would alone place the eastern craftsman at a disadvantage which no hereditary skill, however admirable could redeem."†

Education is nothing if it is not a preparation for life. A complete system of education is one that affords means for the training of the capacities of every individual comprising a nation, enabling him at the end of his school career to earn his livelihood by honest labour. A more

primitive system of education cannot be imagined than that which allows any man to pass for a man of any profession without giving him the necessary general education and the technical training and skill required for that profession. To take an example—A Japanese whose education has stopped with the primary grade will be able to earn his livelihood wherever he may go; whereas a graduate of our University will not be able to do so. There are three stages where a student's career may be discontinued. It may be at the end of the primary, or the secondary or the university or collegiate course. At whatever stage it may be broken, it is not in itself a full preparation for life. There should be three or four grades of technical and professional courses of study to suit the three or four grades of general education, so that at each stage of his school career a student who is unable to proceed beyond may take up the corresponding technical course and prepare himself for life. "There was a time in Japan," says the Educational Report of Japan, "when all the educated there looked to the Government service as the only reward of education and considered it the most secure, dignified, and attractive of professions; but as the ranks of Government officials filled up, there arose a new class of malcontents, young men who had obtained some education but who were not able, or not qualified to obtain posts." These proved the salvation of Japan as the number of technical and industrial courses increased turning these young men to professional and commercial careers. It is a sad feature in our schools to-day, to see the increase of discontented supplementary students year after year. The salvation of India lies in the salvation of these men, in turning these young men to professional careers by introducing a suitable course of technical, industrial and commercial study. It is true that there are even at present some technical and professional schools in our country, but their number is very very small and there is absolutely no connec-

tion, co-ordination or correlation between these schools and the schools of general education. The technical and professional courses do not form an essential part of the school career of every individual that leaves the school. This is the great drawback in our present system of education.

Coming to secondary education, the secondary school is the feeder for all literary and higher technical institutions that prepare men for life. (a) Those that are above the average in the Secondary schools enter the University. (b) Others enter the technical and professional institutes.

TAKING UP (a):

The scheme of studies for these men should be one that would lay a general and strong foundation in the several subjects that a student has to take up in the University. The test should be severe enough to distinguish the fit from the unfit for entrance to the University. A preparatory course of one or two years corresponding to the present Intermediate course may be necessary for specialisation in the case of these students. But there need not be any public examination at the end of this preparatory course. The College authorities should themselves be able to decide which students can enter the University and which cannot. This amounts to saying that the present Intermediate examination of the University is needless and that the scheme of studies in the Intermediate classes should be so altered as to make it a continuation of the foundation laid down in the secondary course and at the same time a preparation for the University degree. There should be no failures in the preparatory course.

TAKING UP (b):

For those who are not qualified to enter the University at the end of their secondary school course, there should be a two or three years' course of commercial, technical, or professional study enabling them to pick up the necessary technical training and skill required for the pro-

fession they wish to follow. In the case of these students the S. S. L. Certificate should be said to be complete only after this supplementary course. The syllabuses for the technical and professional courses should be so constituted as to satisfy the needs of the growing nation and in conformity with the needs and demands of local centres. A perusal of the following courses followed in the "Continuation Schools" of Japan will help us a good deal in the reorganisation of our Educational system soon after the close of the war.

I GRADE (FOR THOSE WHO INTEND TO STOP WITH THE PRIMARY COURSE.)

(a) *Land Industry*:—Physics, chemistry, drawing (free hand), wood modelling, practical geometry, mechanical drawing, designing, dynamics, materials, implements, trades, etc.

(b) *Agriculture*:—Physics, chemistry, natural history, soils, manures, products of the soil, cultivation, implements, harmful insects, plant diseases, horticulture, sericulture, domestic animals, sylviculture, surveying, etc.

(c) *Marine Industries*:—Physics, chemistry, natural history, physical geography, fishing, preparation of fish, rearing of fish, handling of fishing boats, etc.

(d) *Commercial*:—Commercial arithmetic, commercial correspondence, merchandise, geography, book-keeping, laws relating to commerce, foreign languages, etc.

II GRADE (FOR THOSE WHO INTEND TO STOP WITH THE SECONDARY COURSE.)

(a) *Land Industry*:—Civil engineering, metallurgy, ship-building, electricity, woodwork, mining, weaving, dyeing, pottery, lacquer work, designing, painting, and tanning.

(b) *Agriculture*:—Manures, improvement of soils, general crops, vegetable physiology and pathology, animal physiology and embryology, experiments in animals, entomology, agricultural engineering, history of agriculture. Practical course in farming, zootechny, agricultural engineering.

* H. A. L. Fisher, President of the Board of Education and "Madras Hindu" daily, 28th May 1917.

† "The Imperial Gazetteer of India," Vol. III.

ics and politics, agricultural chemistry, entomology and sericulture.

(c) *Marine Industries*:—Outlines of aquatic products, fisheries, aquatic animals and plants and their rearing, navigation, management of boats, meteorology, oceanography, first aid to the sick or wounded, bacteriology, etc.

(d) *Commerce*:—Commercial morality, commercial correspondence, commercial arithmetic, commercial geography, book-keeping, mechanical engineering, commercial products, political economy, civil law, science of commerce, commercial statistics, international law, foreign languages, &c. &c.

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The EDUCATIONAL REVIEW, April 1917.

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THE HEALTH OF OUR STUDENTS.

MANY years have elapsed since the observation was made that Indian students are lacking in physical culture. A majority of them are physically incapables whatever they may be mentally and morally. The dictum of "a sound mind in a sound body" at first sight appears to be falsified. For we find ever so many of these incapables having very bright University careers of which anybody can well be proud. Surely we do find some with strong physique, who are good generally at games. But unfortunately they are not also good at intellectual work. This is so much apparent everywhere that it is almost believed in some parts with the sanctity of Vedic truth that a student bright in the field will be the last in the class and one bright in the class will not be found in the field. The statement is not altogether unfounded. It is very rare to find a graduate with good physique capable of withstanding some amount of physical strain. "A graduate without spectacles is a rarity in these days." He does not go to the field generally nor does the field invite him. With a constitution already in its regress, he enters some office for a poor and starving salary of Rs. 20 or Rs. 30 except in the educational department where he is probably offered Rs. 50. Being of a poor family, he cannot withstand the pinch of his stomach, to satisfy which at least partly, he is compelled to take up the drudgery work of a clerkship in some wretched office. His vitality being already consumed to a great extent in his studies, is now rapidly dissipated till at last, no sooner is he thirty than he pronounces himself to be "an old man," a phrase which an Englishman of sixty would not apply to himself. Thus being an unworthy 'animal,' his once brilliant intellect begins to fade. The high hopes which he once entertained as a student are all frustrated, and he leads a discontented and gener-

ally miserable life which finds final consolation and relief in an early and immature grave.

Probably some may think that the above picture is overdrawn. At least it is very near the truth. I have only to ask my reader how many graduate friends he has. Go to one such a friend, you find him saying, "I am suffering from rheumatism and dyspepsia;" a second says, "I am an asthma patient;" a third, "Life in Madras during my college career has completely undermined my health: The hotel meals have finally wrecked me on the dangerous shoals of tuberculosis." And so on goes the story of our graduates' health. It appears as though God created all diseases for the suffering of the poor Indian graduate. Have we not often come across cases in which a graduate emerging from a poor family goes to an early grave when the whole family is eagerly looking to him for support? I know so many promising young men completing their arts, law, and apprentice-in-law courses only to find a premature grave at a time when all are turning with eager eyes to him to enjoy the fruits of his labour. The old man, the father of the graduate, at last reconciles himself by saying that "such were the decrees of fate." I am certainly glad that such occurrences are not very common. But they are frequent enough to arouse our anxiety. My impression is that they form at least five per cent. of the graduate world in India.

The causes are not far to seek. One important cause is that they neglect physical exercise. The teachers themselves being incapables in the field, do not care to ask students to take interest in games. They have a false notion of dignity and self-respect, thinking that if they mix freely with students, it will be only to lower themselves in the estimation of the student world. They little contemplate on the familiar fact that many of their

European comrades in the service, especially in Missionary schools and colleges, mix freely with the students, elevate their position and self-respect, and teach them good behaviour and how to cultivate sound character, all the while having their own self-respect unimpaired, in fact commanding even greater respect and reverence from them than the reserved and proud aristocratic Anglo-Indian (Is it not a sound maxim that Love conquers more things than hatred?) Many of them think that this is only an exceptional privilege of Englishmen as a ruling class in India. True, we do find some Indians also in the right direction; but they form the exception rather than the rule. This is, I should say, a fault of our nationality. But it is certainly sad to note that even those Indian professors who have had the advantages of English education in the classical atmospheres of Cambridge and Oxford do not adopt the English methods of encouraging games and mixing freely with students. Strange indeed and sad, but that is the fact. Dr. Mullick of the Presidency College, Calcutta, in a lecture at Madras said that you could scarcely find a student in Cambridge who does not take some kind of exercise or other. He said that athletes are held in high esteem and that the games best liked are cricket and tennis, the former being called the 'king of games.' He admitted that even there are found some students with the Indian habit of bookishness, but they are the exception for whom nobody cares. And even they walk a few miles every day. No wonder that English graduates emerge out of their Universities all full of energy, pride and cheerfulness, with many happy recollections of their career in the University.

What is the remedy? It is not far to seek. The first thing to be done is evidently to encourage athletics, games and active habits. A beginning may be made by the institution of prizes, or in other ways best suited to local

environments. But better than the institution of prizes, I would suggest that teachers in our schools and colleges should go and play with the students at least frequently though not daily. They should forget their current opinion that their self-respect can be maintained only by aloofness. I may assure those who hesitate on that score that it would rather be increased. I speak from experience. I shall briefly state the results of one experiment in this direction.

The Head Master of the Government Collegiate School in Mysore is Mr. M. Krishna Iyengar. He is a man of stern morals, a good athlete, and a strict disciplinarian. He long ago set aside all false notions of dignity and self-respect, or rather I should say he was always free from them. He was till recently the Head Master of the Government High School in Tumkur. Reports speak very highly of his career there. Some leading citizens of the place whom I met recently in Mysore told me that when he was there, the extensive grounds adjoining the school were converted into the school play grounds; that all students were compelled to be in the field till 6 P. M. playing football here or cricket there. One of them said, "The play-ground was presenting in his days the appearance of a busy little town." Attendance was enforced as in the regular classes; and the most encouraging thing was that the Head Master was himself in the field every day playing cricket (this is his favourite game) or football in the goal. Under his guidance, and with his energetic and sympathetic co-operation, the young lecturers in charge of the University Entrance Class in Mysore with some others have started a new football team consisting of students and teachers. They had also three matches between students and the staff, and I found that their behaviour was highly commendable, making the game a draw in two matches, and even giving them victory in the third. Since

then, the students have considerably improved in good behaviour, and now treat their teachers with even greater respect than before. This is our experience in Mysore, and I am sure it will be found to be the experience everywhere. If a beginning is made in these lines in all schools and colleges, I am sure that there will come about a revolution in the student world in health, behaviour and character.

While writing this, I am reminded of the famous gymnasium in ancient Athens, and I heartily wish that a gymnasium be created for each school or college, where masters and pupils will assemble every evening for physical culture; needless to say that the friction between the teachers and the taught which frequently makes itself felt in the form of strikes on the part of students will disappear and this will do much in furthering good will and healthy relationship between them. A beginning made in right earnest, I am sure, will meet with splendid success.

As regards the improvement of general health of students, recourse may also be had to "Health and Measurement Cards" as suggested in the January issue of this journal. But I would even go so far as to say that when physical exercise is made compulsory somewhat in the lines above indicated, there would be no necessity for these and for the doctor generally.

I write this with the full hope that all interested in the education of young India will eagerly take up the question and probably furnish a better solution than the one I have attempted to indicate for the vexed problem of our students' health.

C. KRISHNAMACHARY.

TEACHERS THEN AND NOW.

NOTWITHSTANDING the various defects pointed out by critics, the system of our Secondary-school-work at the present day can claim credit for having ushered into existence, a generation of teachers more conscious of and more conscientious in the discharge of their duties than their predecessors. Teachers who under the old system went to their classes with previous preparation could be counted on fingers. To-day under the modern system, it is an open secret that the majority of the teachers is working harder at home than their boys. If in some nook and corner of our Presidency to-day, some teacher does exist who is not in the habit of preparing his lessons previously, he can only be regarded as a relic of the past or as a black sheep to the professional community of which he is at present a member.

In old days, the absence of previous preparation was some times deplorably manifested by some teachers in the nature of the few oral questions with which the lesson commenced. Could a more rotten state of things be imagined than a teacher asking a few questions of the following model, from an Indian History text-book, as a preface to a new lesson?

"The year 1748 was an eventful year in the history of—, well, Gopalan?"

Gopalan answers "India."

"Muhammad Shah died at—?" The next boy to whom the question is directed answers "Delhi." The poor teacher begins to suspect from the looks of "the gems of his class" that the questions are being regarded by them as silly and in his anxiety to conceal his lack of previous preparation, changes the general form and wording of his questions which then become still more ridiculous.

"What did Sahu do at Satara?" happens

ments and exceptional capacity. But the average teacher of the old system did not realize his responsibilities to the same extent as the one of the new system.

Now, if we pause to investigate into the causes, which have contributed to such a decided superiority in the quality of the average teacher of to-day, we shall find that the three following facts deserve special mention:—

i. *The system of writing notes of lessons.*—Every teacher is now expected to write his notes of lessons from day to day and has to submit them on demand to the Inspecting authorities or to the heads of institutions in which he serves. Thus, some home-work is prescribed for him and he is anxious to do his best as there is a chance of its being checked by his superiors on whose good-will, his prospects and reputation will depend.

ii. *The reality of Inspections.*—Inspection has in recent years become a reality and modern Inspectors try to familiarise themselves with the quality of the work turned out by every individual teacher. So teachers also rise to the occasion and carefully utilize the remarks and the hints of the Inspectors for improving their methods of teaching. A good lot of supervision work has now been given to heads of institutions and consequently the daily performances of assistant teachers have become much better.

iii. *The system of each subject being handled by experts.*—The introduction of this system in Secondary schools has done immense good. During the reign of the awe-inspiring Matriculation, it very often happened that a Mathematics graduate taught Geography and a Science teacher taught History. This was attended with disastrous consequences because the cobbler, as the proverb goes, has very often only to talk of his leather. The Mathematics teacher who was called upon to

teach Geography lost much of his time in the calculation of time and of distances between various places. The more important physical and political sides of the subject were almost ignored while its mathematical side was given an undue preference. The Science graduate who taught History used to waste more time over the machines invented by Hargreaves and Arkwright than over the Magna Charta or the Glorious Revolution. Hopelessly staggered by the almost identical names of many of the historical personages, the poor scientist very often made the Saint Nanak Shah and the freebooter Nadir Shah, the Hindu Nana Furnavis and the Musalman Nana Sahib exchange their activities in connection with Indian History. Boys who appealed to him to clear their difficulties with regard to some portion previously done in the class were stigmatised as “impertinent imps” and had to sit down under the frown of the ferule or the threat of prospective imposition. In fact, the teaching of subjects by those who had not specialised in them, ran the risk of being confused and of being twisted and distorted so as to suit individual propensities. Such a system meant ruin both to the teacher and the taught—to the former inasmuch as he was called upon to expose a subject the A.B.C. of which he probably did not know nor cared to know and to the latter inasmuch as it killed the historic sense or the scientific spirit in the boy as the case might be. When His Most Catholic Majesty Philip II. of Spain selected the Duke of Medina Sidonia to lead the Armada, that Spanish grandee is said to have exclaimed that he had not seen the English Channel, that he did not know anything of politics or of fighting by land or sea and also that he did not care to know anything of them. The Admiral's lack of enthusiasm coupled with his unwillingness to acquaint himself with the reality of things he did not know, spoiled the Spaniard's Great Enterprise and a similar

lack of interest in the discharge of a duty thrust upon a school-master against his will must inevitably tell upon the studies of the young boys committed to his care. But to-day the “expert-system” has led to the creation of greater enthusiasm in teachers for they feel now that they can stand on their own legs.

If the enthusiasm and sincerity of the present generation of teachers were to continue in this manner under the proper and direct supervision of the higher authorities—and surely these would continue if they could be made to feel that “theirs is not a hard lot,” then a day of glory would dawn for the student-world. Ramaswami would not be eating mangoes and oranges, Krishnaswami would not be cutting his autographs on the desks, and Kuppuswami would not be enjoying “the honey-heavy dew of slumber” while the teacher would be expounding in the class the principles of capillary attraction or the causes of the French Revolution as their elders very often used to do in those days when enthusiasm was absent among teachers.

I. P. RAMAN MENON.

CLOUD MESSENGER.

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CAME LATE.

Till ten it rained a heavy shower,
The boy was all but wild with joy;
And still the wintry clouds did lower;
“No school there be,” so said the boy.
But yet his sire was not inclined
To have his son do mischief there;
So said “Begone, as you have dined,
’T is early yet, and don’t you stare!”
So starting from his seat he shook
His sister by the hair; from there
To school the readiest path soon took;
And such a run to see is rare!
His way as thro’ a lane he wrought,
His legs most busy in their run
Did slip and in a mire were caught;
Ah! ne’er was there so like a fun!
So pulling himself up he went;
Meantime with oaths by no means sane,
The tutor rash, by age full bent,
Exclaimed and bad his ready cane.
And gasping loud the runner came;
The master first nor turned this way;
Was general laughter thro’. His fame
Soon spread. Now look at him who may!
But now the cruel master, know,
’Tween whom and boys was no love lost,
Cried out “out from my sight you go,
Nor stop; or learn what that will cost.”
Yet ere he lifted up his cane,
The boy, right glad to leave the hall,
Turned back and muttered low of rain;
The mates all stopped him with a call.
Quoth they, “you’ve left your boots
behind!

Clay boots! where did you get the pair?”
All laughed. The master most unkind,
“Thus to be late how do you dare?”
“So much, my sir,” the boy replied,
“Half way from home it ’gan to rain,
I slipped and fell as I had died;

young brains in their process of "by heart" so easily suggested by their all knowing perceptor? Woe to the tutorial doctor who knowingly or unknowingly proceeds to give such a pernicious prescription to his juvenile patients with the object of making their intellectual food become more and more palatable to them.

To conclude, it is of utmost importance that the teacher who has the noble and sacred task of helping the child in the natural development of the powers latent in it should, above all, make it do and live what he teaches by insisting on its self-exertion in everything that concerns it in school-life enabling it thereby to enhance its personal asset so useful to it at all times in life.

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2. PAPACY AND EMPIRE.

In 476 A.D., the Empire of Rome fell, but on its ruins arose an Empire of a totally different kind—a spiritual Empire, holding its sway over the whole of Europe, with the Pope as its head, and an army of priests and cardinals for its moral force. Missions were sent to all quarters of the European globe, and the missions returned successful, bringing kingdom after kingdom within the fold of Rome. Even distant Norway and Sweden welcomed the new religion.

The thunder-rolling Odin was dethroned, and the crucified Christ was installed in his place. And thus the conquest went on, until by the end of the twelfth century, all Europe lay under the spell of the Roman church respecting her authority as if criticism were not. Nor was the Pope, as the Vicar of Christ, the only person to be the object of universal reverence. There was also another Regent of Christ on earth, who received homage of all. It was the Emperor. The Roman Empire had not wholly perished, it left its mark on the German Empire, which received, three centuries after the fall of Constantinople, the official denomination of the Holy Roman Empire. The German Emperor became the Holy Roman Emperor. The idea of a Nation was not there. [That idea, though it had its latent beginnings before the Reformation, became clear and marked only after it.] All European princes regarded themselves as members of the Empire. The Pope and the Emperor were looked upon as the twin champions (or swords) of Christendom.

3. DEVELOPMENT OF CHIVALRY: SARACENIC CULTURE.

We have now to trace the development of a much-hallowed mediæval institution, namely, chivalry and knighthood. The system of knighthood was first instituted by Charlemagne, Emperor of the Franks. And with the system of knighthood was bound up the system of feudalism. And both these were advancing hand in hand with the Christian faith, when, at the Council of Clermont in 1095, Peter the Hermit preached the Crusade. His preaching produced a storm of indignation. One after another, seven expeditions were sent, in all of which, and especially in the third one, almost all the princes and peoples of Europe took part, and fought for the recovery of the Holy Sepulchre. Their success in the end was meagre indeed (the place had to be left in the possession of the Sultan, who, nevertheless,

allowed the Christian pilgrims to come and go) but a far greater and more enduring success crowned their endeavour. The immemorial civilisation of the East flowed into the West. The rudiments of chivalry were reduced to perfect principles. In truth much of the Saracenic culture went to make up the chivalry of the twelfth and the succeeding centuries of the Middle Ages. Polish and courtesy mingling strangely with the martial qualities of the Saracenic race; an eye for beauty of nature and art; delight in the marvellous and the surprising; a copious flow of good feeling, often accompanied by magnificence of form; instinctive goodness and generosity where the heart of other people might fail: these were the chief elements of the Saracenic culture. And as a result of the Crusades, this culture spread over the length and breadth of Europe. And in France especially, the people drank deep at its fountain, and developed, as hinted above, the ideal code of chivalry.

4. EPIC: BIRTH OF ROMANCE, EPIC'S LINEAL HEIR.

An epic is a long poem which recounts in a simple and elevated style a great event (that is historical or believed to be so), and treats of a people in a primitive condition of life. An epic depends on actions for its success, and by its passing from action to action, a paramount interest is created in the reader's mind and this interest is sustained to the last chapter. A thesis in philosophy can hardly find a place in an epic, since an epic writer endeavours not so much to instruct the mind as to please the feelings. Exploits of a hero, half-mythical, half-historical, play a great part in all epics. Such are the characteristics of the epic; and to the Achæans of lesser Asia European literature owes much, for the Achæans originated epic-poetry from the beginning of the ninth century before Christ. When the Chian Homer composed the noblest scenes of the Iliad, down to the end of the fifth century A.D. whence dawned the romance

out His will notwithstanding. When a parish-priest preaches from the pulpit the virtue of humility, we generally turn a deaf ear to his words. But when he adds how the pride of His Sicilian Majesty was brought low, then we are all ears; an impressiveness is produced in our minds, and we forthwith exclaim—"Pride goeth before a fall; but humility invokes the love of God." Christ founded His kingdom through love and service, and this Saviour brought Placidus over to His cause. Placidus died a martyr to his faith. Herein are taught the virtues of patience and forbearance, and resignation to His Holy will. "Suffer the Cross and you will have the crown"—is the gist of the story of Placidus. Even in the Sleeping Beauty, the princess slept for a hundred years—a very short time. Here is a greater marvel. The resurrection of the seven Saints moved all doubting souls to have faith in the Resurrection of Jesus Christ. Other morals there are in plenty, but these are the salient ones.

9. ROMANTIC ELEMENTS.

One point, which mediæval romance lacks and which modern novel has in tedious abundance, is a well constructed plot. But this want is more than made up by the privileges of the romance-writer. He can call forth the Deity or His angels as often as occasion suits him; he can present a picture contrary to nature; and what not. Supernatural aid is sought in the cure of Amys, and in the restoration of Amile's children to life; and the angel is summoned to rule in place of King Robert, until the proud monarch becomes humble. Amys and Amile are so alike in form and tone, that Amys' wife could not distinguish the one from tother. Here, he as in the Comedy of Errors, it is put in for romantic effects. Less romantic but more probable is the fact that the cup of Amys is in every respect like the cup of Amile. That the marriage of the heiress apparent to the Byzantine Crown should take place in the absence of her father,

the Emperor, is far from being real. But without such a contrivance, how can you arrive at a happy conclusion? The wolf and the lion, the natural foes of man, are very kindly to the two sons of Placidus. This is highly improbable. Again, lucky accidents play a happy part. The two sons who serve in the regiment of the father, lodge in a house where lives the unhappy mother. All meet together and exchange greetings. Placidus with his whole family was ordered to be devoured by a fierce lion; but the lion touched them not. The faithful were then thrown into a great furnace; but the fire burned them not. Though dead, they lay calmly as though they slept. This is contrary to nature. "But what is nature in the hands of the Lord, the wielder of nature?" pleads the romanticist. Lastly in the Seven Sleepers there is a jugglery with time. To them 312 years have passed as one night of 12 hours. These things we now-a-days consider as improbable. But to the men of the Middle Ages, such things-sounded as half-probable. And the romanticist took advantage of this implicit spirit to introduce improbable circumstances in his works.

10. GROUP II.—COURTEOUS MERCHANT OF PAVIA.

A wronged lady seeking a champion, a neglected lover pining in love, a prince of the blood royal disinherited for wedding out of his class, or a passionate knight going through fire and water to win his lady's heart—is the central figure in every romance of this group. The first story has an historical incident for its background. Saladin is an historical personage; but here he sinks into a romantic hero, being made to play the Magician's part, more or less. When Messer Torello hears Saladin and his servants implore help, there flows from his heart the milk of human kindness and tenderness, and his instinctive fellow-feeling moves him to administer to the comforts of a passing traveller from a different country. Torello is blessed in that he has in Adelaïeta a help-mate who greatly assists him in

rendering charitable offices to strangers—a blessing, which, alas, does not fall to the lot of all. The vow of a year, a month, and a day by which Adelaïeta binds herself to keep up the memory of her husband is meant to exalt the nature of conjugal relationship in life. The strictness with which she observes the vow has no parallel except it be in the resoluteness with which Savitri marries Satyavan and the perseverance through which she brings him back to life from the hands of Death Himself. The ship on its voyage to Genoa sinks at the same time when the news of another Torello's death spreads through Pavia—O unhappy coincidence! thanks to God that thou art few and far between in real life—Saladin's Magician enables Torello to be cast on his own native land within a short twinkling of the eye. Scientists and specialists! Why waste your time in laboratories to invent a new aeroplane? Here is a professor who will supply our army with a new flying-machine that is more than a match to the German Zeppelin. Come now and settle the price of the copyright. Torello arranges and manages to be present on the wedding ceremony; he convinces Adelaïeta of his existence by presenting her own ring to her.—A very ingenious man. Only we have to lament the rarity of so perfect a monster in this world. The new Bridegroom "gently" acquiesces in the restoration of Torello, the true lord of Adelaïeta. Noble Hermit! come down from high Olympus and teach us the virtue of renunciation,—us poor mortals, who have our eyes centred always on our own selfish interests. Patient reader, it is time now to leave this happy, reunited pair to their own cheerfulness, and to proceed to "Melusine" where greater wonders await us.

11. "MELUSINE."

Raymond attacks the bear, and at last gives it such a terrible blow that his sword breaks, and the point of the blade flows backwards and lodges in his uncle's heart. Raymond is all horror

on beholding such a scene. But he is suspected by none, is married by Melusine, and happily lives with her—well and good. This is a thing not uncommon in this world (where punishments too often light on wrong shoulders and rewards go to unmerited hands). But why ascribe this prosperity to his unwitting and unholy deed? And thereby why violate poetic justice? You ask. Know, then, that the author of a romance is as free in his domain, as the Author of the Universe is in His, to distribute justice according to his sweet will. The never-fading bloom of Melusine as though it were a matter of grace, and the curse she suffers from seem to ill-accord with each other. There is a fairy-like rapidity in her arrangements, but her being an elemental lends an air of plausibility to her quick movements. At his brother's instigation, Raymond is provoked to distrust Melusine's fidelity. Here we are at a loss to understand how he breaks his word all on a sudden—to a lady whose beauty kept him spell-bound, for so long a time. The tradition in the province of Lusignan that the sound of the wind is the cry of Melusine is aptly introduced to produce a romantic thrill in our minds.

12. AUCASSIN AND NICOLETTE: FLORIS AND BLANCHEFLEUR.

Aucassin, the future lord of Beaucaire, falls in love with Nicolette, and makes up his mind to marry her and none else, though she is a slave girl. This is very natural; for so complete is Love's conquest over him; that he is prepared to undergo any danger for his lady's sake. Under love's directions, he defies the paternal command, runs to the forest, and finding her there, travels with her to foreign lands. All this shows Aucassin's love for Nicolette. But of the two, it is the heroine that stands in a bolder relief. After three years of happiness, Aucassin and Nicolette are separated. Aucassin, after long weeks of weary sailing, lands in the port of Beaucaire, where he is hailed as Count Aucassin.

Count Aucassin takes no active steps to discover the whereabouts of Nicolette. Whether the talisman has lost its charms, or whether he is forced by duty to allow "the man" to be overruled by "the Count," we know not. But Nicolette, all honour be hers, forsakes her royal estate, dresses herself as a minstrel-lad, persuades the captain of a ship, bound for Provence, to take her on board, and landing on the Provencal shores and wandering from town to town, she at last comes to the Castle of Beaucaire, where a happy reunion takes place between her and Count Aucassin, the object of her quest.

Then again, the love between Floris and Blanchefleur is of natural growth. Born on the same day and sleeping in the same cradle, learning the same lessons and playing the same games,—how could Floris and Blanchefleur grow without loving each other? This sisterly affection on the one side, this brotherly tenderness on the other, ripens, in course of time, into consummate love. Here, unlike in Aucassin and Nicolette, it is the hero that plays the active part. How, under the strong impulse of love, he sails to Babylon; how, borne in the flower-basket, he meets the delight of his soul; and how, after a long trial, he is permitted by the Emir to marry Blanchefleur—are too touchingly related to need recapitulation.

The watchman on the tower giving timely caution to Nicolette in spontaneous and equivocal numbers; the herd boys (roaming as they do amidst charming beauties of nature) effecting in some measure the reunion of Aucassin and Nicolette; the fisherwoman assisting Nicolette to escape for Beaucaire; the inn-keeper introducing Floris to the warder of the gate; the warder himself sending Floris in a flower-basket to the harem; the maiden Clarice concealing the presence of Floris from the Emir—, are all magnanimous characters and attain here greater literary celebrity than kings and princes, counts and viscounts, whose importance in the material

affairs of this world is all the compensation for the insignificance into which they sink in the stories.

13. GROUP III.—PREFATORY.

We come now to the third and last group. Robinhood who is probably an historical personage, fades here into a legendary character. Robin Goodfellow has much to do in the realm of fancy. Tom-a-Lincoln has a reference to the Arthurian Legend. All the three are romantic all over; so much so that there is no necessity for us to make a long comment. Nor will there be interest (even if I make one) in the mind of the reader to tread over the same romantic mysteries already pointed out in groups I and II, although such mysteries may here be clad in new garbs. Moreover feats of adventure are not, generally speaking, fashionable in romance, unless such feats have "love" for their inspiration. All we need, therefore, is just to catch a few glimpses of the central characters, and pass over the rest.

14. ROMANTIC PECULIARITIES.

Tom-a-Lincoln, though brought up in lonely surroundings, asserts his true spirit when coming to his estate. We are not to ask why this spirit lay dormant in his childhood, or why, again, the first assertion of it should take a mis-direction. All we need learn is that he asserted his heredity after he reached the years of discretion. The description of the Faerie-land and the slaying of the dragon are devices too familiar to need mentioning. One word more about Coelia. Poor Coelia! she must die so that Anglitora might marry Tom-a-Lincoln. By her death the Red Rose Knight got over the dilemma. Whether, when the hero determined to slay the dragon, he determined also to desert the princess Coelia and marry the reward of his victory, viz., Anglitora, or whether he set to do the work simply to put an end to the sorrow of the people (i. e. without any expectation of reward), we know not.

Robin Goodfellow has the king of the Fairy-land for his father and a mortal for his mother: his exploits render help to some and hindrance to many. Now, this kind of double origin, this mode of active interference of the supernatural in the affairs of the human, is a relic of the Greek notions. Robinhood robs the greedy rich of their wealth, and showers it on the needy poor. His is a character in which vice is the manure, duly nourished by which virtue grows and bears splendid fruit. And lastly comes Reynard the Fox which is the exact counterpart of the busy London man—, who has no scruples of conscience, whose sole aim in life is centred on selfish interest, and who deliberately sacrifices, in order to gain his ends, all means, fair or foul he careth not.

15. GLIMPSES OF HISTORY.

A few remarks on some important side-issues and I am done. To write history, "accurate in facts and sound in conclusions drawn therefrom," is not the business of the romance-writer. His chief function is to transport us to a realm where imagination is the guiding force, and romantic mystery the predominating note. To this end, he employs a thousand and one means, and history is one amongst them. In the first group we dimly perceive the gradual progress of Christianity in different parts of the Roman Empire,—from the time when Christianity was at its lowest ebb, to the time when the Papacy was

standing firm on the ruins of the Empire of Rome. The cruel persecution of the faithful in Christ can be seen in Placidus and the Seven Sleepers. Placidus honoured as a general was burned because he became a Christian: the Seven Saints were entombed living. In Constant the Emperor the spirit of toleration had become an established fact: the Emperor, himself a heathen, allowed the existence of an abbey in his capital. And in Amys and Amile, and King Robert of Sicily, the Christian faith had reached its highest point; pilgrimages to Rome had become the custom of the time. The second group takes us into the chivalry of France which takes pride in being the cradle of knight-hood. Merchants on the Italian coast-towns acted the part of transporters of Eastern goods, and I may add, of Eastern culture to the West. In group III Robinhood of England is historical; scarcely a romantic poet but has paid some tribute of respect to him.

16. CONCLUSION.

Since no other love is so exalted or so absorbing as that between man and woman, the chivalrous group occupies the first place in the order of romance. The adventurous group occupies the last place. And between the two, that is, occupying the second place, comes the religious group. Nonetheless it plays a nobler, and in many cases a more substantial part.

C. G. SUBRAMANIAN.

GRAPHICAL ALGEBRA—containing about 36 diagrams with problems, by T. V. SWAMINATHA IYER, B.A., L.T., Headmaster, Wesleyan Mission High School, Triplicane. Rs. 4.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

Compulsory Education Bill.

The Hon'ble Mr. A. S. Krishna Row has sent a copy of the following draft Bill to the Secretary, Legislative Department, with a memo to get leave to introduce the Bill in the local Legislative Council.

Whereas it is expedient to enable Municipal Councils to make better provision for the extension of elementary education, it is hereby enacted as follows:—

1. This Act may be called the Madras District Municipalities (Amendment Act, 1917); and it shall come into force on such date and in such local areas as the local Government may, by notification from time to time, direct.

2. After Section 121 of the Madras District Municipalities Act, 1884, the following sections shall be inserted:—

121-A. Any Municipal Council, may, with the previous sanction of the local Government and subject to such rules as the local Government may frame in this behalf, direct by notification, that the parent or guardian of every boy between six and ten years of age and residing within its local area, shall cause such boy to attend a recognised school for elementary education, unless there is a reasonable excuse for the non-attendance of such boy.

121-B. Any of the following circumstances is a reasonable excuse for non-attendance:—

(a) That there is no recognised school within a distance of one mile, measured along the nearest road from the residence of the boy, which the boy can attend, and to which the parent has no objection on religious grounds, to send the boy.

(b) that the child is prevented from attending school by reason of sickness, infirmity, domestic necessity, the seasonal needs of agriculture, or other sufficient cause;

(c) that the child is receiving instruction in some other satisfactory manner.

121-C. No person shall take into his employment any boy who ought to be at school under this Act.

121-D. After the issue of a notification under Section 121-A of this Act, every Municipal Council shall provide sufficient school accommodation for imparting elementary education to all children of school-going age, residing within its local area.

121-E. After the issue of a notification under Section 121-A of this Act, every Municipal Council which cannot provide for the elementary education of all the boys in its local area either out of its own resources or with grants-in-aid from the Government, may, with the previous sanction of the local Government, levy an education cess, the proceeds of which shall be solely devoted for the elementary education of such boys.

121-F. (1) No fee shall be levied from the parent or guardian of a boy compelled to attend school, if his monthly income does not exceed Rs. 20.

(2) The Municipal Council may, in other cases, remit the whole or any part of the fee payable by such a parent or guardian either on the ground of poverty or for other sufficient reason.

121-G. After the issue of a notification under Section 121-A of this Act, the Municipal Council shall appoint a School Attendance Committee, to secure the attendance of every boy who resides within its local area and who ought to be at school.

121-H. A Municipal Council shall not issue a notification under Section 121-A of this Act or levy an education cess under Section 121-E of this Act unless the issue of such notification or levy of such cess is determined by a resolution of the Council supported by not less than three-fourths of the members present at a meeting specially convened for that purpose and unless such resolution is similarly confirmed after six months from that date, by a like majority and at a like meeting.

121-I. The Municipal Council may, with the previous sanction of the local Government frame bye-laws, not inconsistent with the provisions of this Act:—

(1) regulating the appointment of School At-

tendance Committees and defining their powers and duties.

(2) prescribing the procedure to be adopted by such School Attendance Committees to secure the attendance of boys at school, and

(3) specifying the penalties to be inflicted on the parents or guardians of the boys that ought to be at school or on the employers of such boys or employers' agents, for wilful breach of the provisions of this Act.

3. Section 122 shall be repealed.

STATEMENT OF OBJECTS AND REASONS.

The object of this Bill is to enable Municipal Councils to make elementary education within their local areas compulsory. The Bill does not make it obligatory on any Municipal Council to introduce the principle of compulsion in the system of elementary education under its control. It only permits such Municipal Councils as are ready and willing to take up that responsibility, to do so.

The example of other advanced and civilized countries in the world has clearly established that in order to make any substantial advance in the diffusion of knowledge among the masses, it is necessary to resort to the principle of compulsion. When the late Mr. G. K. Gokhale introduced his Elementary Education Bill—No. 8 of 1911—in the Imperial Legislative Council, for the gradual introduction of compulsory education, the Bill was circulated throughout the country; and the opinions of the local Governments and administrations, of the local bodies and of various other persons, officials and non-officials, were invited. It is clear from the opinions so received and published; that the Bill met with enthusiastic support from all classes of people in the country. In the course of the discussion of that Bill in the Imperial Legislative Council, the Hon'ble Sir Harcourt Butler suggested the desirability of amending the Municipal law or otherwise by local legislation so as to enable a local body to introduce the principle of compulsion; and the late Mr. G. K. Gokhale said that there was no objection to such a course.

There are some Municipalities in the Presidency which are now able to introduce the principle of compulsion in the system of elementary education within their local areas without incurring any financial obligations, beyond their means. There are about 20 Municipalities where the number of boys in elementary schools is more than 10 per cent. of the male population therein. There are several Municipalities which are not spending an adequate share of their income on education and which can, therefore, allot further funds, for the extension of elementary education. It is necessary and desirable that such Municipalities as are able and willing to introduce the principle of compulsion should be empowered to do so by an appropriate amendment of the District Municipalities Act, 1884. The Bill contains necessary safeguards to ensure that Municipalities do not abuse their powers, by an hastily or ill-considered action on their part.

The present Bill is only intended to make the elementary education of boys in Municipal areas compulsory. It is only intended to serve as a beginning of the experiments to be to secure a wide diffusion of education among the masses. It is hoped that, in course of time, elementary education of both boys and girls whether in urban or rural areas, will be made compulsory.

Clause 1 suggests that the local Government be given power to declare by notification when and in respect of what Municipality, the Act is brought into force. The Act is not to be put into operation throughout the country, all at once.

Clause 2 contains the provisions which have to be made in the District Municipalities Act, to enable Municipal Councils to make elementary education compulsory.

121-A enables the Municipal Council to issue a notification directing the parent or guardian of a boy between 6 and 10 years of age to cause such boy to attend a recognised elementary school.

121-B specifies the circumstances which amount to reasonable excuse for non-attendance of such boys in a recognised school.

121-C prohibits persons from employing boys, who ought to be at school.

121-D imposes on such Municipal Councils the obligation of providing sufficient school accommodation.

121-E enables such Municipal Councils to levy an education cess when they cannot make adequate provision for elementary education with their own funds or with grants-in-aid from the Government.

121-F exempts the parents or guardians of boys that are compelled to be at school from payment of school fees when their monthly income does not exceed Rs. 20 and in some other cases.

121-G enables Municipal Councils to appoint School Attendance Committees to secure the attendance of boys at school.

121-H provides that the resolutions of Municipal Councils introducing compulsory education or levying education cess should be supported and confirmed by not less than three-fourths the number of members.

121-I enables Municipalities to frame bye-laws to enforce and carry out the provisions of the Act introducing compulsory education.

Clause 3 suggests the repealing of Section 122 of the Act which now becomes unnecessary and superfluous.

PROCEEDINGS OF A MEETING OF THE MADRAS LEGISLATIVE COUNCIL held on 23-5-17.

Resolution re Constitution of the Secondary School-Leaving Certificate Board.

The Hon'ble Mr. B. Venkatapati Raju moved the following resolution:—

'VII. This Council recommends to the Governor-in-Council that the School-Leaving Certificate Board be constituted so as to consist of an equal number of Headmasters of High Schools and Lecturers in Colleges and as many Government educationists as the Government deem fit, to improve the system of education imparted to the High School students and to better regulate the Secondary School-Leaving Certificate Examination.'

"In doing so he said, the resolution is a very modest one, because it contemplates the appointment of an equal number of High School Headmasters and also representatives of the University to serve for the guidance of College Professors and as many Government educationists as the Government may deem fit or necessary in order to control the secondary education system. With reference to this, Your Excellency, we notice that there were frequent changes in the matter. We had the Matriculation Examination as a stepping-stone to enter the portals of the University and that was held to be most rigid and not at all elastic; and they wanted to substitute for that examination by introducing the School Final Examination. With reference to the School Final Examination, that has been in force for the last few years and it has undergone some changes. Experience shows that some more changes are absolutely necessary. In the year 1914, when His Excellency the Viceroy, Lord Hardinge, laid the foundation-stone of the University, it was represented to His Excellency that the improvements effected in this Presidency

were in the matter of vernacular education and also in the matter of the substitution of a more elastic School Final system in the place of the old Matriculation system. His Excellency, in approving that, stated: 'The acceptance by the University of the Secondary School-Leaving Certificates is calculated to foster the best interests of High School education by permitting elasticity in the courses and involving a less rigid system of examinations.' Therefore, what we expected of this examination is elasticity in the course and a less rigid system of examination. But we notice elasticity is missing and also more rigid is the examination. Those who care to look into the examination papers during the last few years will find that they have not adopted any particular mode of examination. It all depends upon the examiner for the time being. The History paper this year and the Elementary Mathematics paper this year are all quite impossible and far more rigid than what you found in the Matriculation Examination. That is not what was contemplated. By the courtesy of the Hon'ble Mr. Stone, I understand that, though the examinations are rigid, some steps will be taken to alleviate the hardships caused by such severe examinations. With reference to the course of studies, Your Excellency, I consulted various Headmasters in the Presidency and almost all of them have unanimously condemned the present grouping of subjects, the present syllabus and the present examination. They state that the grouping is bad, that the syllabus and the course of study are bad and that it requires immediate and effective changes in order to give relief to the students.

"To enumerate only a few points I may mention to Your Excellency that though the vernacular is intended to be a matter of special importance in the curriculum of these students, it is practically relegated to a very unimportant position. With reference to these compulsory subjects, that ought to be made a compulsory subject just as English is, and unless we adopt that system I

do not think there will be much improvement in the present course. They introduced as compulsory subject Mathematics which they say is only elementary; they make all students compulsorily study the subject. I notice even the students who have taken Mathematics as their optional subject in their advanced studies have found it difficult to answer some of the questions and some of the Headmasters are of opinion that Elementary Mathematics is unnecessary because what is necessary is taught in the lower forms and that this should be thrown into the branch of optional subjects. With regard to Physics, both theoretical and practical, the standards are very high and the course of study in Electricity is unnecessary, and in Chemistry we find practically the same thing and it needs revision. And in Algebra and Geometry the standards are very high. With reference to English, they have introduced detailed and non-detailed studies; and they expect the students to study non-detailed books without the help of teachers which is practically impossible, when we see the mode of selection of books for non-detailed study. Added to the high standard which they expect, the examinations are stiff and the success of the students, instead of increasing from year to year, we find, is decreasing from time to time.

"For instance I may invite the attention of the Council to the fact that the Presidency average in 1910-11 was 30.1; in 1911-12 it was 34.9; in 1912-13 it was 43.2; in 1913-14 it was 43; in 1914-15 it was 31; and in 1915-16 it was 33. All that shows that there is neither system in the examination nor in the valuation. It all depends upon the nature of the papers set by the Board of Examiners and instructions given to the Assistant Examiners for the valuation of these papers. Under these circumstances, my Lord, it is absolutely necessary that on the Board of Studies we must have persons who are in actual contact with the students in the matter of these studies.

"The Hon'ble Mr. Stone has been kind enough to state that this is also the view of

the Government and that they have appointed some persons on the Board and he tells me there is one European Headmaster, and there is one Indian Headmaster, Mr. Seshu Ayyar of Mayavaram. Besides these two, the Hon'ble Mr. Stone tells me, we have Mr. Venkataratnam Nayudu, the Principal of Pittapur Raja's College at Cocanada. But my objection is not with reference to individuals, but my objection is when we want persons in actual touch with the teachers in the High School department, we cannot include persons who have got control in the College department and High School also. We cannot expect the Principal of the Christian College to be intimately acquainted with the High School department though the High School department is practically controlled by the Christian College. The Hon'ble Mr. Stone has suggested we have Mr. Meston, who was for some time the Headmaster of the High School department, though later on he was not in the High School department. What I suggest is that a clear prominent position should be given to the persons who are in actual contact with the subjects taught in the High Schools, so that these people can very well understand the capacity of the students. In the normal state of things in any country, we expect persons properly taught to secure 50 per cent. of success in the examination whereas in India unfortunately, so far as these classes are concerned, the maximum is about 27 or 28 per cent. That shows that there is something wrong: either the students are dull or the teachers are not capable of teaching but much more truly I can say the examiners are not suited to the standard.

"In this connection I may state there is no use of ignoring the views of the people who are vitally interested in the education of their children and who are as much interested as the State itself. In the matter of secondary education we cannot say that the whole of our expenditure was incurred by the Government; Government are only meeting a very small proportion of expenditure—we may

put it between 8 and 12 per cent. The rest of it comes mainly from the school fees, that is, the parents contribute nearly four-fifths and only one-fifth is contributed by the grants made by the Zamindars and Municipalities. Under these circumstances it is equally important for the interests of the country that the people's wishes are not ignored. Even in England it was stated that these matters ought not to be left entirely in the hands of the educational experts, because in the recent commission it was said that the views of the people who are more directly interested in the education of the country are usually important as the views of the education experts themselves.

"Therefore in conclusion I submit to Your Excellency whatever shape the resolution takes, my point which ought to be taken notice of and which might be given due weight to is that prominence should be given to the position of the High School Headmasters in the Board of Studies; and unless and until that is done the present difficulties of the irregular grouping of subjects and of not a regular course of examination depending upon the vagaries of the examiners from time to time will continue. Under these circumstances, I earnestly appeal to the Government and the most sympathetic educational officer we have, the Hon'ble Mr. Stone, that he would do his best to see that the interests of education do not suffer by any preconceived notions but that he will see that the main object is that the students are properly trained and the portals of the University are widely opened so that we may notice a wider expansion of education from year to year instead of reducing it by obstructions caused by any manner whatsoever. Therefore, I place this resolution for the consideration of Government."

The Hon'ble Mr. K. R. V. KRISHNA RAO:—"I am most happy to second this resolution. This resolution recommends that on the School-Leaving Certificate Board a larger number of Headmasters of High Schools should be allowed to be appointed with an equal number of Professors of Colleges.

It is necessary that Headmasters of High Schools should find a place in the Board because they are the persons who are immediately in touch with High School students and the courses of studies which are desirable to be introduced in the School-Leaving examination. My Lord, at present the grouping of subjects is found to be defective and the courses of study are not supposed to be adequate. The direct method that is now being largely employed in the teaching of English and other subjects has its own merits and the direct method, taken by itself, is very good indeed. But there are very few teachers who can teach by such methods and the consequence has been that the courses of studies that are now being followed in the High Schools, and especially in the Sixth Form are not being properly digested by the students.

"My Lord, another great complaint with regard to courses of studies is the most unimportant and the most backward place that is being allotted to the vernaculars. Except in vernacular composition, vernaculars are not taught in the Sixth Form at all. It is necessary that vernaculars should be given a proper place in the compulsory subjects, that is the A group subjects in the Sixth Form. It has been urged upon the attention of the Government for a very long time that the course of instruction in High Schools should be imparted through the medium of vernaculars as far as possible in all non-language subjects. Well, such has been the desire of the public and the place that is now being allotted to the vernaculars in High Schools and especially in the School-Leaving Certificate examination is so unsatisfactory that it requires to be taken special notice of.

"Again, my Lord, there are so many other difficulties in the courses of study and the grouping of subjects which require special attention. Again the intention of substituting School-Leaving Certificate examination for the old Matriculation was that it would facilitate a greater number of students entering the University course than they used to do under the old Matriculation examination.

Instead of that object being realised it has been found from year to year that this School-Leaving Certificate Examination has become as rigid as, if not more rigid than, the Matriculation Examination which was in vogue some years back. Year after year we have found people complaining against the small number of students that are allowed to pass this examination, and the moderation scheme and the scrutiny that is given and the number of marks that are added to the students year after year, all these testify to the fact that the School-Leaving Certificate examination has not been as successful as it was thought in the beginning it would be in making the course less rigid and affording facilities for students to enter a University course more easily than under the old Matriculation examination.

"My Lord, it is also necessary that the guardians who are more interested and who are also having a stake in the country should be consulted in the matter of Secondary Education. And these High School Headmasters who are in intimate touch with the courses of studies and the conditions of students in the High Schools as also the guardians of the pupils will be able to give some valuable advice in the matter which, I think, is advisable for the Government not to ignore altogether. With these remarks, I heartily support this resolution and recommend that the School-Leaving Certificate Board may be made to contain a large number of High School Headmasters. There are no doubt at present a few—about two Headmasters. But we want that more Headmasters of High Schools must be associated with the Board."

The Hon'ble Mr. J. H. STONE:—"Your Excellency, the Hon'ble Member who moved this resolution began by speaking of the want of elasticity in the scheme for the award of Secondary School-Leaving Certificates, and he said one reason for making the change from the old Matriculation Examination was that we might have more elasticity. I beg to say that the change has been productive of precisely that result. There is

great deal more elasticity in the examination conducted for the award of Secondary School-Leaving Certificates than in the Matriculation partly because there is a wide choice of subjects and partly because the examinees have had such considerable choice of questions in the examination-papers. That almost is an answer to the complaints made as regards this year's History paper and Mathematics paper. I cannot help deprecating the anomaly of a Legislative Council discussing examination papers in Elementary Mathematics. If I leave the Hon'ble Member's criticisms unanswered some misconception may result. With regard to the papers in History and Mathematics it ought to be remembered that candidates had a considerable number of questions to choose from for answering. With regard to the History paper, I am quite willing to admit that the History paper is too good a paper for the purpose in view. It was an excellent paper and its excellence has been testified to by the fact that people have written in the newspapers in defence of it. As I said, the paper was an excellent one—perhaps it may be slightly too much to expect from the candidates. It will be very useful to schools, because it contained excellent suggestions to teachers as to how they should view the subject of English History and how they should teach it.

I leave this question of examination papers and go on to another point mentioned by the Hon'ble Member who seconded the resolution. He says the Secondary School-Leaving system was introduced with the object of admitting a larger number of students to the University course. Now I certainly must repudiate this idea. The system was introduced for a variety of reasons. One thing that was hoped from this system was that people would get a certificate whether they were fit for the University course or not and that those whose certificates showed that they were not fit would drop the idea of a University course and take up some other line. That was certainly one object in view; and I am sorry to say that object has

not been very largely realised. People are very unwilling to believe that their boys are not fit for the University course and that is one of the difficulties we have to contend against. People wish that their sons should go to the University when they are manifestly unfit. It is because in the past Principals of Colleges yielded to that view which was too commonly entertained by parents that we had considerable trouble last year about the failures in the Intermediate Examination.

“Well, then, there are other complaints against the Secondary School Leaving system. We are told by the Hon'ble Member that the present grouping of studies and syllabuses are bad, without any qualifying words as far as I remember. They are simply bad. We are to suppose that they are entirely wrong. I cannot naturally admit that and I can hardly believe that this Council will believe that everything is entirely wrong. I do not say there is no possibility of improvement; there is no doubt, as time goes on, the scheme will be improved. But to base an argument for a change in the constitution of the Board on the assumption that things are bad seems to be rather a mistaken course to proceed upon.

“Then the question of vernaculars has again been spoken about and I explained not very long ago that the Government had approved of certain recommendations made several years ago for giving greater prominence to the vernaculars. We are introducing the compulsory study of some amount of vernacular literature and I hope that will come into force next July. Then we had the opinions from various school-masters placed before us—as for instance there is no need for students to take up Elementary Mathematics because, I suppose, these boys go through the University course without being examined in Mathematics. But the University in my opinion may very properly say that we do not want pupils to begin our courses who have not gone through an elementary course of Mathematics and who have not undergone the course satisfactorily. It is an

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elementary principle that for a University course a certain amount of elementary knowledge of Mathematics is necessary. There is no University in the world that would admit students who have not undergone a certain amount of mathematical discipline. In regard to the question of the Elementary Mathematics papers and the syllabus, let me say that Mathematics in the public examination is elementary and it is not a course that any school boy ought to be allowed to avoid. If boys are failing in Elementary Mathematics it is because they know that they have not to pass through any University course in the subject. It is entirely their own fault. Then we get to the other courses mentioned—Physics, Chemistry, Algebra and Geometry. These are courses which the boys have to take in order to show that they are qualified for the University course by specialising in these subjects. With regard to English I do not know what the complaint is. It is said that boys are given books which are not for detailed study and the teachers do not give them any help with such books. I do not think that anybody ever has taken that view of the teacher's duties. They say that success in English is decreasing because the average in English is going down. Well, the average in English is not going down though it has tended to be smaller than at the beginning. The reason for that is not increase in the difficulty of the examinations but because teachers have been growing less and less careful. It was laid down in the scheme that Headmasters should only send up for the examination boys that are fit. The criterion of fitness is whether they are fit to be promoted to a higher class in the school if such a class existed. I am quite sure there is increasing laxity on the part of Headmasters as regards the boys in the Sixth Form fit to be sent up. I recently had a report about two managers who have apparently repudiated that rule. They sent up the whole of the Sixth Form because they seemed to think that it was entirely left to their discretion. The rule is laid down there and these are the cases

of two managers. How many managers have been acting like that in a similar way it is impossible to say. I think a great deal of the fall in the average marks in subjects is due to carelessness in sending up boys for the examination.

“Now I come to the more immediate question—the constitution of the Board. The Hon'ble Member who moved the resolution, it seems to me, is rather inclined to take the view that he would have a certain number labelled as Headmasters and a certain number labelled as Government officers and University nominees. In constituting this Board what we have to do is to get as much experience and knowledge of educational matters as possible. We have on the Board men who are not merely Headmasters or Professors or Inspectors; there is hardly a man on this Board who is not qualified in a variety of ways. There is hardly a man about whom we can say that his experience is limited to one particular kind of education which will be useful only when that aspect is being considered. To begin with, we have the University nominees. Out of them there is Mr. Meston. As the Hon'ble Member mentioned, he is well known for having had large experience of school work and continuing to take an interest in school work. Another University nominee, who is interested in University work, is Mr. Hunter. He has been in charge of a large school although he is now attached to the Presidency College. We have got two Inspectors of Schools, because they have had considerable experience at Madura and elsewhere and are certainly keenly interested in all school matters. Again, we have Mr. Venkatarama Ayyar about whom we may say the same. Mr. Green is Inspector of Schools now and has the additional advantage of having been in a College and seen the sort of pupils which the schools turn out. Then we have three gentlemen appointed to represent the schools. Mr. Venkataratnam Nayudu, Principal, Pittapur Raja's College, Cocanada, which has a High school attached to it. It is impossible to suppose that Mr. Venkataratnam Nayudu, being in charge of a High school, is out of touch with High school work. Then we have Mr. Seshu Ayyar of the Municipal High school.

Mayavaram, who fitly represents High schools. Nobody would object to him. Then we have Mr. Miller who is interested in a High school at Madura. I cannot see how these people do not represent school work. There is an idea that the University nominees have a preponderating influence on this Board. I say most emphatically it is not so. I have gone through the list of the Board—and I have omitted to mention myself and I claim that my interest is as much in connection with schools as with University—and I say to the Council that it has been my constant endeavour to see that on this Board schools are properly considered and that the interests of the University do not preponderate.

"Your Excellency, I have spoken so far in defence of the Board as at present constituted. I do not think myself it would be easy to get a better Board. I do not expect that its proceedings will be free from criticism. If this Board were changed and some of these gentlemen ceased to be members and some Headmasters were put in their place, I do not think we should find that an improvement had been effected. The Board has constantly to be effecting some kind of compromise. It has to think what the University may require. If people are not possessed with the idea that every boy in a High school in this Presidency is fit for the University, secondary education would be systematised and greatly improved by the present system.

"One other point before I sit down. Although I have not admitted the validity of the criticisms against our curricula, I would remind Honourable Members of what I mentioned some time ago that these curricula have been revised and they have been principally revised with the object of providing for an increasing amount of vernacular; but in the revision we have thoroughly overhauled and considered what might possibly be omitted from them. My belief is that the net result of this revision is to simplify the curricula. As regards the grouping of studies, I am not prepared to agree with Headmasters who complain about them. As a matter of fact, it has been discussed by the Board and the Board certainly is not in favour of

making great changes in the grouping of subjects. One particular point is the B subjects and this has given a good deal of trouble and I may say that it is in contemplation to make some changes in the B as well as C subjects. I am not prepared to ask the Government to make any change in the Board at present. I am instructed to oppose the resolution."

The Hon'ble Mr. B. VENKATAPATI RAJU :—
"Your Excellency, in reply to certain observations of the Hon'ble Mr. Stone that all the students who have obtained School Leaving Certificates are not intended for a University course, it is no doubt true that some of them seek employment elsewhere and enter life; but that does not at all satisfy the condition that the persons who enter the University life are dwindling from time to time. As the population increases from year to year, we naturally expect more students to enter the portals of the University, whatever the nature of the studies adopted might be. When we notice there is no such increase in the number of students who study in the Colleges, I must appeal once more that there must be something wrong somewhere which justifies an enquiry in the matter.

"In the matter of the question of Intermediate classes, which was introduced by the Hon'ble Mr. Stone, I may just mention one point. In the year 1891, candidates for F.A. were 2,048 and 740 passed; whereas ten years later in 1901, though there was an increase of population the students that appeared were 1,924 and 730 passed; and ten years later in 1911, 1,453 only appeared and 592 passed. That clearly shows that there is some obstacle thrown in the very entrance of the University course.

"Another point that was referred to by the Hon'ble Mr. Stone is that vernaculars would be given a prominent position by bringing it into A group—compulsory group. I read from the report of 1915-16 that it was intended to be brought up that year and I hope it will be brought up as a compulsory subject next July.

"With reference to B subjects, which was referred to by the Hon'ble Mr. Stone, I may state that is a class which ought to be abolished altogether, because some subjects are stated to be brought up under B group which the teachers do not teach and the students do not care to study. What is the use of placing on paper some class of subjects which no students care to study and no teachers care to teach. It is an anomaly that ought to be abolished.

"The only other thing is optional subjects. Some more important subjects might be placed in it. But that is not a matter for consideration now. The last point which the Hon'ble Mr. Stone stated was that the Board which he has selected was the best. I am not disputing that. There may be best men—not only those mentioned by the Hon'ble Mr. Stone, but we may have 50 best educational experts. Nobody complains about the number. What I complain about is whatever may be the educational experts' prominent position we want minorities to be represented and we want the representatives of High Schools on the Board in order to understand their view of the matter, and therefore to say we have got the best men and we do not want these persons is not a proper reply. Whether it is desirable to have a larger number of persons who are in immediate contact with High School subjects is the point to be considered. In respect of that position I still press my resolution."

The resolution was put to the Council and lost.

Resolution *re* a Committee to consider the Course of Studies in the High School Department.

The following resolution stood in the name of the Hon'ble Mr. B. Venkatapati Raju :—

"VIII. This Council recommends to the Governor-in-Council that the Government be pleased to appoint a Committee for the re-consideration of the course of studies and the grouping of subjects taught in the High School Department."

XXIII

His Excellency the PRESIDENT :—"The Hon'ble gentleman does not wish to move resolution No. VIII."

The Hon'ble Mr. B. VENKATAPATI RAJU :—
"With reference to resolution No. VIII, the Hon'ble Mr. Stone has been kind enough to tell me that he is going to consult the Headmasters of schools in order to find out whether any change is necessary in the matter of the grouping of subjects. If that be so, I do not press the resolution because the appointment of a Committee would prolong the matter. I want it to be settled at an early stage. An early consultation will be more useful than the appointment of a Committee. If this is the view of the Hon'ble Mr. Stone, I do not press the resolution."

His Excellency the PRESIDENT :—"If the Hon'ble Mr. Stone has given the Hon'ble Member that assurance, I am sure he may be satisfied with that."

The Hon'ble Mr. B. VENKATAPATI RAJU :—"Yes."

With the permission of His Excellency the President, the resolution was withdrawn.

RESOLUTIONS MOVED IN THE TRICHINOPOLY DISTRICT EDUCATIONAL CONFERENCE, 1917.

Resolution I.—That this Conference views with alarm the growing number of students left adrift in this big city in private hotels without proper supervision for lack of sufficient hostel accommodation for them in schools and colleges. It is therefore proposed that—

(1) An appeal be made to schools and colleges for extending their hostel accommodation.

(2) An appeal be made to the public for the establishment of healthy students' homes and a Committee consisting of the following gentlemen be appointed to make an appeal and submit a report to the Association as early as possible :—

Messrs. S. Arpudhasamy Udayar; T. V. Swaminatha Aiyer; P. E. Subramania Aiyer; S. S. Vyasa Row; G. Sesha Aiyangar.

(3) The number of students obliged to live at present in private hostels for want of hostel accommodation be formed into groups, each group being placed under the supervision of a member of the staff of any school or college in the locality.

Resolution II (A). I (a) That, in the IV and V Forms, the following five subjects be taught according to the outlines of a syllabus drawn up by the S. S. L. C. Board to be worked in detail by the Headmasters of High Schools to suit local conditions and requirements:—

1. English.
2. A Second language—Vernacular or classical.
3. Elementary Mathematics.
4. History (England and India) and Geography.
5. Elementary Science.

(b) That, in the VI Form, subjects 3, 4 and 5 be dropped and in their place any one of the following groups of optional subjects be studied along with English and a Second Language:—

1. (a) Algebra and Geometry. (b) Physics and Chemistry.
2. (a) Botany. (b) Physics and Chemistry.
3. (a) History of England. (b) History of India.
4. Any two of the following groups of Commercial subjects, i.e., a & b or a & c, and so on.
 - (a) Book-keeping and Commercial Arithmetic.
 - (b) Commercial Practice and Geography.
 - (c) Typewriting and Shorthand.
 - (d) Indexing and Precise-writing.

N. B.—1. The above arrangement of optional groups is intended to suit the grouping of subjects in the Intermediate and it is expected that there should be a considerable reduction in the extent and intensity of the present syllabus so that students in the Intermediate course may begin where they had stopped in the Sixth Form.

2. It also provides for a student who wants to enter life after the school course is over.

3. It also allows specialisation to begin in the VI Form which may in a way be regarded as a preparatory class for the Junior Intermediate.

4. It of course implies that satisfactory progress

in subjects 3, 4 and 5 in the IV and V Forms is insisted on before granting promotions to boys.

II. That a public examination be held only in the following subjects once a year at the end of the VI Form course:—

1. English.
2. Second Language (Text, Translation and Composition).
3. Subjects in any one of the Groups mentioned in I (b).

III. (a) That the strength of S. S. L. C. Board be increased to twelve, and

(b) that not less than a third of the strength of the Board be chosen from among experienced Headmasters of the High Schools in the Presidency.

(c) That the selection of Assistant Examiners be confined only to those that are actually engaged in teaching High School classes.

IV. That the Public Examination be held, not in March as at present, which is most unsuitable by reason of its heat, but in the month of November beginning on the last Monday of that month.

II (B)—This Conference respectfully recommends that, with a view to make education really efficient in this country, provision be made for raising the status of the teaching profession by adopting the following recommendations among other means:—(a) provision for a Pension Provident and Insurance Funds managed or controlled by Government for the benefit of teachers in all recognised institutions; (b) increase of the teachers' pay on fixed and ear-marked salary grant systems and by the introduction of a fixed scale of salary in all recognised schools; (c) special privileges be conferred on teachers such as exemption from profession tax, formation of electorates composed of teachers within the respective areas to return a member to a Municipal Council, to the District and Taluk Boards, and nomination as Honorary Magistrates; (d) conferring by Government of titles of honour and distinctions on teachers or grant of jaghirs to the same for long and meritorious services; (e) granting, by Managers, of free education to the sons of the teachers employed by them.

II (C)—This Conference is of opinion that the use of English as the medium of imparting instruction in Indian schools is a great disadvantage in the

matter of the acquisition of real and useful knowledge and retards the diffusion of the same among the people at large; and that therefore the vernaculars should be gradually made the media of instruction in non-language subjects in Secondary Schools, English continuing to be taught as a compulsory subject. That this resolution be communicated to the Director of Public Instruction and also to the Headmasters and Managers of all Secondary Schools.

II (D)—That in the opinion of this Conference it is high time for Government to appoint Medical Inspectors who will periodically visit schools with a view to examine the sanitary and hygienic conditions of school and to advise as to how the children receiving instruction be made physically fit to do so.

II (E)—That in the opinion of this Conference, the results of the Ootacamund Conference convened by Government to fix the maximum of salary for clerks in the different branches of Public Service should be extended to the Urban and Rural Primary Teachers.

II (F)—This Conference requests the Director of Public Instruction and the University of Madras to allow *bonafide* teachers to apply in private for all the University Examinations as in Bengal, the United Provinces, the Punjab and other provinces and thus gradually to increase their general educational qualifications.

Resolution III.—With a view to give a wide scope for the diffusion of the Commercial Education in Southern India this Conference resolves that, while thanking the Government and the framers of the S. S. L. C. scheme of this Presidency for the inclusion of Commercial subjects in the S. S. L. C. syllabus, it prays that the Government and the University would give greater facility for the expansion of Commercial Education by introducing certain Commercial subjects in certain groups of the Intermediate and B. A. Pass courses, thus providing for graduation in Arts with specialisation in Commerce to a limited extent at least.

Resolution IV.—This Conference recommends that a central District Educational Board consisting of Headmasters and Assistant-masters nominated and elected with the District Asst. Inspector of

Schools as Ex-officio member thereof, should be formed to institute and conduct a comparative public examination at the end of the III Form course to keep up a standard of uniformity, to issue certificates with the opinion of the examining Board

Resolution V.—With a view to secure greater freedom in the internal work of schools in all purely educational matters, to promote greater co-operation and participation in actual school work and to cultivate a spirit of healthy union among masters, this Conference recommends the formation of School Councils comprised of elected members from among the staff and the Headmaster as President ex-officio, that such Councils be recognised as adjuncts to every institution and that the functions of these Councils be purely deliberative and advisory in character.

Resolution VI.—Being alive to the fact that culture and knowledge will be spread faster by increasing the number of Universities and that Trichinopoly, next to Madras, has been the largest centre of educational activities with its two first-grade Colleges and three large flourishing High Schools teeming with thousands of students, this Conference requests—

(a) that the Government be pleased to establish a University at Trichinopoly which might comprise the civil districts of Tanjore, Trichinopoly, Madura and Tinnevely;

(b) and that, for the furtherance of this object, the Government be requested to appoint a Select Committee consisting of the Principals of all the Colleges, Headmasters of the High Schools in the said districts and veteran educationists of the Presidency, to frame proposals and collect funds promptly for the establishment of the proposed University.

Resolution VII.—This Conference recommends that the distinction between Elementary and the lower classes of Higher Elementary or Secondary schools be removed, that deserving pupils from Class 4 of Elementary schools be freely admitted into the I Form and deserving pupils from Class 7 of Elementary schools be admitted into the IV Form of Secondary schools, that incomplete Secondary schools in rural areas be largely started and that

rules relating to fees, staff qualifications and other conditions of recognition, be suitably modified.

Resolution VIII.—Having regard to the fact that Teachers' Associations are useful instruments in the dissemination of knowledge and that, as such, they should be well equipped with magazines, journals and booklets general as well as pedagogic and with a very good library this Conference respectfully requests that (1) the Teachers' Association be helped with grants and T. A. from Municipal, Local Board and Provincial Funds (2) and copies of printed reports, reviews, and circulars and publications and such other G. Os. Edl. as are placed on the Editors' Table by Provincial and Imperial Governments, be given gratis to all registered or recognised Teachers' Associations.

Resolution IX.—Having regard to the present day curriculum and methods of teaching and the need for specialised instruction in the higher Forms and to the fact of the teachers in the Primary Classes and Secondary and High School Forms being overworked, this Conference recommends that in the interests of real teaching efficiency, the number of periods of work allotted to a teacher out of 30 periods per week be reduced to the maximum of 20 periods in the case of High School teachers and to 22 in the case of Lower Secondary and Primary teachers.

Resolution X.—This Conference recommends the alteration of the old rules relating to holidays and vacations in Board, Municipal and Government institutions, in consonance with the changes brought about by the new scheme and in conformity with other recognised aided institutions—that is the minimum of 180 working days be fixed as in aided schools and the rigidity of 18 sanctioned holidays be modified.

Resolution XI.—This Conference recommends that a trained and certificated teacher of one grade need not be required to undergo a further period of training in the higher grade after passing the higher general Education Test, but that it may be deemed sufficient for purposes of professional qualifications under the Educational rules, if he passes in the higher Teachers' Theoretical Examinations in private.

Resolution XII.—This Conference recommends that the District Educational Conference be held

annually under the auspices of the Trichinopoly Teachers' Association, on the first Friday and Saturday of the month of March and that Managers of all institutions be requested to observe these days as holidays on their school calendars so as to enable all teachers to take part in the proceedings.

Resolution XIII.—That this Conference recommends that the District Teachers' Association, Trichinopoly, be requested to start an Arts and Industrial Museum at Trichinopoly.

Resolution XIV.—That this Conference recommends that the District Teachers' Association, Trichinopoly, be requested to organize a series of popular lectures in Tamil at Trichinopoly and other Teachers' Associations' centres in the District on hygienic, scientific and other useful subjects for the benefit of the masses including the Elementary school teachers.

PREFATORY MEMORANDUM re DISTRIBUTION OF WORK IN THE SECONDARY ENGLISH SCHOOLS OF THE UNITED PROVINCES.

Head Masters and Managers of Secondary English Schools are permitted, with the approval of the Inspector, and in conformity with the general principles that underlie the curriculum, to make modifications in the class-wise distribution of the work in any subject. Permission is also given, with the approval of the Inspector, to re-group scholars in classes above the primary stage for Arithmetic, Drawing, Classical Languages, Manual Training, and Science, independently of the recognized classification.

English is no longer to be used as the medium of instruction in classes up to and inclusive of Class VIII; History, Geography, Science, and Mathematics are to be taught in the student's own language; but the use of English technical terms should be encouraged in Classes VII and VIII, and in Mathematics students should be examined in the English language at the end of the middle stage. In the high stage alone should English be used as the medium of instruction.

Object lessons have been prescribed in the curriculum as Optional subjects from Class VI downwards, but they should not be introduced into any school without the permission of the Inspector,

who should satisfy himself that trained teachers are available and can be spared for teaching them. In no case should the work be entrusted to untrained teachers.

The teaching of English by the Direct Method should not be attempted except by specially trained teachers. Where such teachers are not available in sufficient numbers for all classes, a teacher or teachers, qualified to give such instruction, might be employed to supplement the ordinary Class teaching by taking classes separately for an hour or so a week each.

Informal teaching on the subject of good manners should be given in all schools, and Head Masters may add at their discretion to the reading matter of any class of the Middle Section, such portions of *Madan-i-Tebzib* by Mirza Habib Husain, Khan Bahadur, as they may deem suitable for the class. The book is available in two parts at four annas each.

TEMPERANCE TEACHING.

Informal talks in class on the evils, both physical and moral, resulting from intemperance should be held by teachers at intervals during the session. Such talks are preferable to a course of set lessons according to a prescribed syllabus, but Head Masters should see that the subject is not neglected nor the teaching merely perfunctory.

NOTE.—(a) The book in English recommended for the use of teachers is—

Alcohol and Human Body by Sir Victor Horsley and Mary D. Sturge (Macmillan & Co.).

(b) The book in vernacular recommended provisionally for the use of teachers is—

Manual of Temperance (Urdu or Hindi), by M. Mewa Ram, B.A., Assistant Inspector of Schools, Allahabad Division.

MEMORANDUM ON HOME LESSONS SET TO STUDENTS BY TEACHERS IN THE U.P. SCHOOLS.

(Issued under the authority of G.O. No. 790/XV—212, dated the 19th August, 1910, Educational Department.)

From the frequent complaints received regarding the excessive amount of work set to scholars by

teachers for preparation at home there is reason to believe that the proper relation between work done out of school by the scholar and work done in the class-room is not always perfectly understood. Investigation has disclosed much divergence of opinion as to the amount of home lessons that may be reasonably exacted from the pupil in the different stages of his school career, the kind of work most suitable for preparation out of school hours, and the proper distribution of the time available for home preparation among the different subjects of study. Enquiries concerning the prevalent practice yield the conclusion that the matter is left too much to the discretion of individual teachers. Some times the pupil is expected to prepare for every lesson in school, and some times the work set is wholly unsuitable in both quantity and quality for study at home. The matter clearly does not receive the attention it deserves, and since the abuse of the system of home lessons may produce permanent injury, both physical and mental, it is necessary that steps should be taken to protect scholars from it. It is desirable, therefore, without prescribing any rigid uniformity of system, to lay down certain general principles for the guidance of teachers.

(1) The fundamental principle on which home work rests is one which, it is to be feared, is too often forgotten, viz., that teaching and learning are two complementary processes, neither of which can be dispensed with or divorced from the other without detriment to educational progress. Activity on the part of the teacher must correspond to activity on the part of the learner. If either is absent, the process becomes one sided and the result barren. Accordingly the teacher who confines himself to the "delivery" of lessons in school, with which home work is not at all or imperfectly correlated, will be little less deserving of condemnation than the teacher at the opposite pole, who neglects his class teaching and endeavours to make up for it by setting long tasks to be done at home.

(2) Though axiomatic it is too often forgotten that home work must be adapted, both in quantity and quality, to the capacity and the age of the scholar. Home work should not exceed the quantity which a boy of average capacity can be expected to

using the words and phrases of the reader in simple sentences. Written composition from the Vernacular into English idiomatic sentences (at least once a week).

CLASS VI.

Conversation, Reading and Recitation.—To carry on simple conversation in English to read with correct pronunciation from a reader; to render into the Vernacular passages from the reader; to use the words of the reader in simple sentences, and to answer in English questions based on the matter in the reader. To recite from memory passages chosen from the reader.

Spelling and Writing.—To spell the words of the reader; dictation in ruled books of passages chosen chiefly from the reader; writing in copy-books.

Grammar and Composition.—Revision of previous work in grammar; nouns in apposition; classification of nouns; pronouns; adjectives and adverbs; case of nouns and pronouns; direct or indirect object; verbs; number and person; transitive and intransitive; weak and strong; participles; conjugation of remaining tenses. Analysis of simple sentences. Oral and written exercises in the above.

Written composition (at least once a week), e.g., using the words and phrases of the reader in simple sentences, reproduction of simple stories, practice in answering in writing easy questions on the subject-matter of the text. Written composition from the Vernacular into English idiomatic sentences and continuous prose. In connection with the above incidental instruction in elementary points of arrangement, construction, and punctuation.

Upper Middle Section.

CLASSES VII AND VIII.

Literary Course (at least four periods a week).—To carry on conversation in English; to read with correct pronunciation and expression from the prescribed text; to render into the Vernacular passages from the prescribed text; to form sentences and to answer questions in English based on the vocabulary of the text; to recite from memory suitable passages of English poetry and prose (to be selected by the head master).

Supplementary Reading.—At least one easy book per session (for suitable books, see proceedings of the Provincial Text-Book Committee).

Dictation and Writing.—Dictation (at least once a

week) of unseen passages of the standard indicated by the prescribed text. Writing in copy-books.

Grammar and Composition.—Revision of previous work. Verbs; active and passive voices; moods; gerunds and verbal nouns; auxiliary verbs; complements of verbs; formal parsing; clause analysis of complex and compound sentences; elementary instruction in direct and indirect speech. Oral and written exercises in the above.

Written composition (at least once a week) including simple free composition, e.g., letter-writing and description and composition from the Vernacular into English idiomatic sentences and continuous prose. Incidental instruction in arrangement, construction, and punctuation.

The books approved for translation exercises are those by—

(1) Gordon; (2) Stapley; (3) Munshi Dwarik Parshad; (4) Manual of Translation into English for Hindustani Students, by E. S. Oakley; (5) Translation Practice in four Parts for Lower and Upper Middle Sections, by B. D. Gordon (for use of the Middle Section), (6) Exercise in Translation from Urdu into English, by J. R. Cornah, published by M. Gulab Singh and Sons, Lahore.

The following books on English Grammar and Composition are recommended for use:—

(1) A Primer of English Grammar } Published by
(2) A Manual of English Grammar } the Christian
Literature Society for India, Madras.

(3) The Middle School English Grammar, Parts I and II (Standards V and VI) by L. Tipping, Macmillan & Co.

(4) Longmans' Junior School Grammar for India, by D. Salmon and A.J.C. Oakley.

(5) A Simple Grammar of Modern English, Longmans, Green & Co.

(6) The Suggestive Composition Book, Parts, 2, 3 and 4 (Blackie and Son).

(7) Lessons in English Composition, Books 1—3 by J. C. Nesfield, Macmillan & Co.

(8) A Junior Course of English Composition, S. K. Nath and G. C. Nath, Calcutta.

(9) Progressive Practice-Book in "Direct" English Composition—Oral and Written—by P. Wren (K. and J. Cooper, Bombay).

(10) Picture Composition, Pupils' Book, by J. N. Fraser (K. and J. Cooper, Bombay).

AIMS AND METHOD IN THE TEACHING OF MATHEMATICS.

Reasons for teaching Mathematics.—We teach Mathematics with a two-fold aim. On the one hand we use the subject as a means of developing the intelligence of the pupil; on the other hand we endeavour to make him skilful in such operations with numbers as are likely to be of practical use. Thus the teacher will endeavour to make clear to pupils the reasons which underlie processes and will also train them to gain the power of rapid, accurate, and confident calculation.

Neatness and arrangement in Written Work.—Great stress should be laid on neatness and care in arrangement. Errors in working can often be traced to slovenly arrangement or badly formed figures. Pupils should be trained to arrange their work in a series of logical steps for each of which a reason can be given. Particular care should be taken in the early stages that units are not omitted, and that every line is a correct statement.

Oral Work.—All new processes should be introduced and fixed in the mind by means of examples worked on the blackboard. These should involve only small numbers, so that calculations may be performed without resort of pen and paper. Even after a new rule has been established "Mental Arithmetic" should be a feature of most lessons. A few minutes given daily to the oral solution of problems is a valuable means of revising past works and in training pupils to gain rapidity and confidence in calculation. Up to class IV the teaching should be largely oral. In Geometry definitions must be first explained and understood and then learnt by heart.

Concrete illustrations.—Wherever possible concrete aid should be used. In the earliest stages the various operations should be taught by means of illustrations with objects which can be easily procured, such as headless matches, nuts, etc. Tables of weights and measures should be visualized by measurements of lengths, areas, volumes, capacities, and weights; pupils should be practised in estimating the weights of common objects, the heights of tables, rooms and buildings, the areas of surfaces, the capacity of vessels and the distances between fixed points in the class-room and play-ground and should

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verify their estimates by experiments. At a later stage in the teaching of vulgar fractions and decimals the foot-rule graduated in inches and twelfths of an inch and in centimetres and millimetres should be in constant use. The metric measures of length, area, volume, weight, and capacity should be learnt thoroughly; the class should be given exercises in measurement of length in the metric system, and allowed to handle metric measures of weight and capacity if available.

Nature of examples.—Once a rule has been learnt it should be applied to varied examples both oral and written. Examples should, as far as possible, relate to matters within the experience of pupils and the numbers employed should be such as are likely to occur in practice thus although pupils should be made familiar with operations in British money, prices in problems should as a rule be given in Indian money. Operations with large numbers should be the exception, and when they are employed they should be taken from real life census returns, statistics of trade, returns of revenue, etc. In multiplication and division of decimals the methods adopted in the early stages should be such as can be employed in contracted work at a later stage; thus the methods given in Hall, Stevens and Sims' School Arithmetic for Indian Schools are preferable to the older methods. To test the grasp of a new process and to connect it with what has been already learnt, it should be applied to problems which involve also the application of previous rules, thus no preceding rule should be allowed to drop out of sight.

Correlation.—The teacher should take every opportunity to break down the partitions which usually separate the three branches of elementary mathematics. Thus even at an early stage in Arithmetic "rules" should be expressed symbolically in the language of Algebra thus the rule for the addition and subtraction of fractions may be stated in a general form as follows:—

$$\frac{a}{b} + \frac{c}{d} = \frac{ad+bc}{bd}$$

Algebraical methods should be freely employed in the solution of arithmetical questions, and the graph should be used to solve questions both in Algebra and Arithmetic.

Revision.—In no subject is revision more necessary than in Mathematics. As the mental machinery of pupils becomes somewhat rusty from lying up for the vacation, such revision is especially necessary at the commencement of each session.

Text-book.—Even the best text-book cannot take the place of the teacher. He has to expand the theory, which is usually a brief summary; he has also to provide the concrete illustration, to break down the artificial barriers which separate topics from topic and to supplement the lists of examples, by supplying oral questions and by inventing problems which are likely to bring the subject into close touch with the interests of the pupils.

SYLLABUS OF THE COURSES IN MATHEMATICS. Preparatory Section.

CLASS A.

Arithmetic.—Notation and analysis of numbers in connection with concrete objects, as far as 50, and the writing of those numbers. Oral addition of any two numbers whose sum does not exceed 50, and subtraction of any two numbers neither of which exceeds 50. Simple oral problems in addition and subtraction. Construction and memorising of tables up to 5×10 .

CLASS B.

Arithmetic.—**Revision.**—Notation of numbers as far as 1,000. Analysis of numbers as far as 100. Simple addition of numbers, the answer not to exceed 1,000. Simple subtraction of any two numbers, neither of which exceeds 1,000. Construction and memorising of tables up to 10×10 . Simple multiplication by numbers not greater than 5. Simple oral and written problems in the above.

Lower Primary Section.

CLASS I.

Arithmetic.—**Revision.**—Notation extended to one lakh (1,00,000). The four simple rules with no term or answer exceeding one lakh. Construction and memorising of multiplication tables up to 10×12 . Addition and subtraction in Indian money with no term or answer exceeding Rs. 1,000. Simple oral and written problems in the above.

CLASS II.

Arithmetic.—**Revision.**—Further extension of notation to crores and millions. The four compound rules and reduction in Indian money and weights, in common use in the United Provinces, with

miscellaneous examples. Simple oral and written problems in the above.

Upper Primary Section.

CLASS III.

Arithmetic.—**Revision** of the previous work with special attention to (i) the best methods of working; (ii) application to oral and written problems relating to things within the experience of the pupils; (iii) rapidity in oral work; and (iv) neatness and orderly arrangement in written work. The four compound rules and reduction in British money. Factors and prime numbers.

CLASS IV.

Arithmetic.—**Revision.**—G. C. M. or H. C. F. by factors. L. C. M. The four compound rules and reductions in British weights, and measures of length, time, and capacity in common use, instruction to be as realistic as possible. The four simple rules in vulgar fractions with easy examples. Oral and written problems in the above.

Lower Middle Section.

CLASS V.

Arithmetic.—**Revision.**—More difficult examples in vulgar fractions. Vulgar fractions of concrete quantities. Practice. Metric measures of length, weight and capacity, instruction to be as realistic as possible. Simple calculation in the four simple rules with decimal fractions (excluding recurring decimals). Conversion of vulgar fractions into decimal fractions to a given number of places, and *vice versa* (excluding recurring decimals). Oral and written problems in the above.

CLASS VI.

Arithmetic.—**Revision.**—Simple percentages. More difficult examples with decimal fractions (excluding recurring decimals). Decimal fractions of concrete quantities. The unitary method. Simple interest. Oral and written problems in the above.

Geometry.—Drawing and measurement of straight lines and angles; parallel straight lines; angles of a triangle; construction of triangles and parallelograms.

Upper Middle Section.

CLASSES VII & VIII.

Arithmetic.—**Revision.**—Measurement of the area of a rectangle and the volume of a rectangular solid in the British and Metric systems. Land measures in use in the United Provinces, Square foot by

factors. Simple and compound proportion. Proportional parts. Harder percentages. Profit and loss. Oral and written problems in the above.

Algebra.—Symbolical expression. Substitution. Brackets. Addition. Subtraction. Easy multiplication. Easy division. Simple equations with one unknown quantity. Graphs of straight lines. Plotting of statistics. Simultaneous equations involving two unknown quantities (both equations linear). Graphical solution of simultaneous linear equations. Simple problems involving the above.

Geometry.—As in the text-book prescribed.

AIMS AND METHODS IN TEACHING HISTORY.

Class VI.—Whether the pupils have copies of the text-book or not is immaterial. If they have, the greatest care must be taken that the lesson does not develop into a reading lesson. Spontaneous narrative alone will secure the desired ends. As the story proceeds, the teacher should question the class to see whether they follow the course of events, and should encourage free communication of the feelings which the narrative produces in the minds of the pupils. The pupils may at intervals be required to write out a story which they have heard, in their own words. No notes should be taken, for these will be memorised and reproduced. What is chiefly required of the teacher is a power of vivid narrative and of feeling the emotions which he strives to arouse. There should not be a written examination in this class, but occasionally the head-master or a senior teacher should test the class as a whole by an oral examination.

Classes VII & VIII.—However simple the book may be there is an ever-present danger that the pupils will derive incorrect ideas from it. The lessons therefore should be read in class in sections of suitable length, the teacher confining his explanations of the text to making the meaning clear. After the reading he should partly by narrative and partly by question build up a connected account of the events described. During this he should, as far as the means at his disposal allow, bring to the aid of the text pictures, sketch maps, time charts, reproductions of coins, and other historical objects. The aim at this stage is to connect the main facts as a whole and to develop a sense of time and of cause and effect. He should not fail to seize any chance of showing how one event was the natural outcome of others. The treatment should be largely biographical. New ground should as a rule be broken with the

help of the teacher; the pupils however should independently learn at home what has been previously taught in class. It will be found useful to set the class questions to answer in writing at fairly frequent intervals. This makes for clarity of ideas and expression.

Classes IX & X.—The treatment does not differ radically from that in classes VII and VIII, but the pupils should usually read each day's lesson before it is taken up in class. The teacher should emphasize the sequence of events. It is often found effective at this stage to follow a topical order in preference to a chronological one, as this consolidates and systematizes the pupil's knowledge better.

AIMS AND METHODS IN TEACHING GEOGRAPHY.

Geography is on the one hand a study of the configuration of the Earth—its continents, seas, mountains, forests, rivers, etc., on the other hand it is a study of the needs of man and how he makes provision for these needs. Thus we only partly teach geography if we limit our teaching to a study of physical facts; the chief value of these facts is that they help us to understand how men live and work in different parts of the earth.

In studying a country consider it first as a whole—its general build, the long and short slopes of the land, the way in which rivers run, where there are large fertile tracts, where desert and where forests. Then in more detail; the great mountain ranges, the chief river basins, the great plains, the climate, the population and occupations, the political divisions, the trade routes and towns. For each of these topics a separate map should be drawn on the blackboard and by the pupils.

The teaching should not be confined to a mere list of names. Facts are of value only if brought into relation with other facts. The teacher should point out why here there is a forest, there a desert, how the nature of the coast has promoted intercourse with other countries, how mountains have prevented intercourse, how rivers have promoted trade and density of population, what natural resources have given rise to particular industries, how the climate has influenced the life and work of the people. Facts are needed and must be learnt; but a fact is remembered with greater ease if it is understood, and facts are of use only if we can connect them with causes and results.

In giving facts to the class something more

a bare recital is needed. No subject makes greater demands on the descriptive powers of the teacher. He should endeavour to carry the pupils in imagination to the country he is describing; to do this he should, as far as possible, supplement vivid description by pictures, photographs, picture postcards, and, if suitable arrangements can be made, lantern slides.

Sketch map by pupils.—The pupil's note-book should contain a series of sketch maps for each country, each map illustrating a particular feature. Thus, one map should contain the mountain system, a second map the river system, a third the distribution of rainfall, and so on. Almost every topic discussed can be illustrated by a sketch map and benefits thereby. In order to draw these sketch maps it is not necessary for pupils to learn to draw the outline by heart, except perhaps in the case of India, whose outline is easily remembered. The teacher should supply blank outline maps (cyclostyled or printed) and these should be used to illustrate various topics. Many maps, each illustrating a single feature, are preferable to one elaborate map crowded with details.

Blackboard map by the teacher.—These should be built up as the lesson proceeds; each map should contain the elements essential to the lesson and no others. Coloured chalks are a valuable help, they make the various features stand out clearly from one another, and if the same colour be used consistently to represent the same feature, e.g., red for high land, blue for rivers, yellow for towns, etc., much time will be gained. Outline maps drawn on blackboard cloth are convenient as the basis for these maps; they may be procured from Messrs. G. Phillip and Son, through Messrs. Longmans, Green & Co., Bombay.

Wall maps.—The school should in addition possess for each continent (1) a photographed relief map, and (2) a plain orographical map, preferably without names. It is important that the map chosen should contain only essentials.

The teacher should make his own maps to illustrate special points, e.g., vegetation, density of population, rainfall, etc.

Atlas.—Each pupil should possess an atlas. The atlas should be brought regularly to the geography class, and should be constantly referred to during the course of the lesson.

Books and apparatus.—The teachers should consult the "Guide to Geographical Books and Appliances" published for the Geographical Association, by G.

Phillip and Son (Messrs. Longmans, Green & Co., Bombay).

AIMS AND METHOD IN TEACHING DRAWING.

Method.—Teachers of drawing should bear in mind that it is far more important to train the eye and develop the suppleness of the hand than to produce mechanically accurate copies of drawings. They should therefore see that pencils of suitable length are used and kept properly pointed. They should forbid the shifting and turning of the paper in the process of drawing and insist on the adaptation of the hand to the lines required. They must accept responsibility for seeing that scholars do a satisfactory amount of work, and while on the one hand hasty and untidy work is to be checked, on the other hand anything of a laboriously minute and mechanical nature is to be avoided.

In model drawing the importance of rapidity as well as accuracy should be emphasized. The principles of perspective must be thoroughly explained and ample demonstration and personal correction must occupy each lesson. The surface on which the object stands should always be indicated, and the drawing should be made as large as the paper will allow.

It must be borne in mind that geometrical, perspective and model drawing—though related—are distinct exercises; while the former requires the application of geometrical knowledge, the latter fails in its object unless it strengthens the ability to draw simple objects freely, in good line, and correct relationship of position.

As regards geometrical drawing, neatness, absolute accuracy, and facility in using a few instruments are the ends to be kept in view.

All diagrams should be lettered and made of large size. Both ink and pencil should be used, alternately or in combination. Each problem must be carefully "taught" by the teacher and not merely copied by the boys on the larger scale from the text-book pages.

In Freehand and model drawing no mechanical aids should be allowed.

AIMS AND METHOD IN THE TEACHING OF SCIENCE.

In framing the courses for Classes VII and VIII the Department has kept in view on the one hand the limitations of poorly-equipped schools, in which there are few facilities for practical work, and, on

the other hand, the ambition of the better-equipped schools to commence laboratory work as early as possible. The courses for Classes VII and VIII may be worked through entirely in an ordinary class-room; but it is desirable that, where facilities exist, even in these classes there should be some individual practical work by pupils. Where there are no facilities for practical work, as many as possible of the experiments (e.g., on length and area) should be performed by pupils at ordinary school desks, the remainder being done at the demonstration table by the teacher, assisted by pupils chosen from the class. In Classes IX and X, in addition to class work and demonstrations, all pupils should receive a regular course of practical instruction in the laboratory.

The subject-matter of the courses has been divided into different topics: "length," "area," "volume," "heat," "chemistry," etc., and each class advances its knowledge under each of these heads as far as possible; the main factors which determine the amount which can be attempted in any class are the knowledge of Mathematics possessed by the class, and the skill in experimental work which may be expected from it.

Although the subject has been thus divided into several topics, it does not follow that these should be taught as separate "subjects" in water-tight compartments. In teaching under any particular head the teacher should freely refer to what has been taught under other heads, when by so doing he can bring items of knowledge into close relation. In particular, it is undesirable and unnecessary to draw fine distinctions between Physics and Chemistry, and there is no need of separate laboratories for these two branches of Elementary Science.

The best laboratory for elementary work is the simplest, and any paraphernalia which tend to obscure the relation of cause and effect should be scrupulously avoided. The department does not recommend elaborate and expensive fittings; on the contrary, teachers are encouraged to utilize the simplest means by which the subject can be adequately studied.

While great importance should be attached to experimental work, it must not be forgotten that a principle is not thoroughly known unless it can be applied. The teacher should therefore invariably test the pupil's grasp of general principles, laws, and formulae, by applying them, wherever possible, to the solution of examples involving calculation.

Thus each pupil in Science will have two note-books: one in which he enters a record of all experiments performed by him, and another in which he writes accounts of demonstration experiments performed by the teacher, and works numerical examples.

Diagrams of apparatus should be sectional elevations, not perspective drawings; these sectional sketches should be neatly and accurately drawn with the various parts approximately proportional in size.

Some uniform plan should be followed in entering the results of experiments; the headings, "object of experiment," "apparatus used," "method," "results," and "conclusion," are appropriate. Where possible, observations should be entered in tabular form.

Pupils should not rely on single determinations of quantitative results, whenever possible several should be found and the average calculated. The standard of accuracy should be laid down for each experiment, and each pupil should obtain results within the standard, or should repeat his experiment until he has obtained a satisfactory result. This standard must vary with the nature of the experiment and the apparatus available, and should be laid down by the teacher himself.

SCHEMES OF OBJECT LESSONS.

Instructions to teachers.

OBJECT LESSONS.

Aims.—The chief aims of these lessons are to train children to observe accurately and to quicken their interest in the world around them. In the preparatory stage these are the sole aims. In the higher classes the lessons will further be used to train children to reflect on the results of their observations and to reason about things; they will compare and contrast things. The lessons may be used for other purposes; they may add to the children's intelligent knowledge of common things, and be made the basis of instruction in language and drawing. While it is of importance to keep these additional aims in mind, we must regard them as of secondary importance; if we endeavour to impart to children information, however useful it may be, without making them handle and examine things for themselves, we shall fail to make our teaching the means of developing habits of observation, and the information imparted will be superficial and inaccurate.

Choice of objects.—Familiar objects, chosen from the locality in which the school lies, are recommended. These are better than unfamiliar objects, as a means of training children to use their eyes; we shall make them observant if we get them to see what they had failed to notice in obvious things. Thus, the majority of children regard all leaves as having the same shape and structure, until their attention is drawn in an observation lesson to differences. Further, objects which can be so easily procured that all children may bring a specimen to the class and examine it, will give more interest to the lessons than objects which can be shown from the teacher's desk or by pictures. A lesson on milk would therefore be a much wiser choice than a lesson on sodium, and a lesson on a parrot than one on a rhinoceros.

The objects should be chosen with reference to the season of the year and to the age of the pupils. Thus, lessons in which flowers are being examined should be taken in the months of March and April, when the children will have opportunities of examining many varieties; and while a lesson on germination would be suitable for class IV, it would be too difficult for class II.

In order to give opportunities for comparison, the objects chosen should have some connection with each other. In the lowest classes they will be linked together by dealing with similar groups of objects (e.g. common crops) between which the pupils may note comparison and contrast. In the higher classes there should be more continuity of subject; the series of lessons should give the children opportunities to make deductions, and should lead them to the statement of simple general truths such as "Animal life is dependent on plant life." By association in this way the lessons will gain greatly in interest, and will admit of gradual progress in difficulty along particular lines.

The actual objects should, wherever possible, be obtained. Nearly all the lessons in the following lists can be illustrated by objects which the children can bring to school. If the teacher encourages his pupils to exert themselves in this way, he will help greatly to make his lessons a success. Pictures are a poor substitute for the real object and should be used in the place of objects only when lessons are given on certain animals which cannot be shown in the school, e.g.,

camel, elephant, but which may form the subject of a lesson if children are familiar with them.

It is not necessary to have many objects in a course. The teacher should not attempt to give lessons in all the objects mentioned in the following lists; he should make a selection. Habits of observation are better cultivated by examining a few objects thoroughly than by cursorily looking at many.

Method of teaching.—The first necessity in an object lesson is an object to observe. It would not be necessary to say this, were it not a fact that many teachers are content with a picture, a model, or even a description from a book. A picture or model will help to make a description more vivid, but cannot take the place of the object itself.

The teacher should first find out from the class all they know about the object. He should then lead them to examine it more closely and notice things which formerly they had failed to observe. Finally, he should lead them to see how the object is adapted by its structure to its uses, ways of living, or mode of growth.

The most common fault of these lessons is that the children do nothing but listen. The teacher should guard against the temptation of imparting much information in one lesson for children become tired and bewildered by many facts and descriptions. The information should only be such as the object itself gives; any further information may, if necessary, be given in other lessons. Thus a lesson on stamps may be an object lesson, but an account of the way in which letters are conveyed from one place to another should be left to the reading or composition lesson; while the growth of particular plants may be studied in the observation lesson, the distribution of crops in a particular part of the country should be taught in the geography lesson.

"One thing at a time" is a good rule. But while it is not desirable in one lesson to deal with several kinds of objects, there should always be several specimens of an object in the class and, if possible, each pupil should have a specimen before him.

Questions should be put at the beginning of a lesson to find out what the children already know about the object. In the course of the lesson ques-

tions should be put in order to stimulate the children to think and to look at things for themselves. At suitable stages or at the end of the lesson the teacher should question the class to find out what they have grasped. He should also at the end of suitable stages encourage the class to ask him questions.

The teacher's language should be simple and his own (i.e. not quoted from a text-book) and if he uses technical terms, these should only be such as the boys are likely to use subsequently. The value of the lesson as a means of training pupils in the correct use of language in speaking and writing should not be overlooked. The pupils should therefore be encouraged to express the results of their observations by accurate description in speaking or writing, and while the teacher should not make his lesson one on grammar or composition, he should not allow careless expressions to pass uncorrected. In the preparatory classes the lessons should take the form of conversations between teacher and pupils. In Classes I and II the children should be asked to write the name of the object and, where possible, to make drawings. In Classes III and IV simple records should be made, and children should invariably be asked to make simple drawings. The records may at first be copies of the teacher's summaries on the blackboard, but these should be replaced as soon as possible by simple descriptions, written by the pupils in their own words.

More and more will be expected of pupils as they grow older. In the preparatory stage the sole aim of the lessons will be to awaken in children an interest in things around them; the lessons must be short and bright, and questions will be put solely to make children examine things. In Classes I and II the objects chosen will be more difficult of analysis and will require more careful examination than those of the preparatory classes; pupils will be led to compare and contrast things, and will be questioned to make them think why the properties and structure of the object are specially adapted to its uses, ways of living or mode of growth. In Classes III and IV there will be greater demand than in previous classes on the reasoning powers; things will be classified, deductions will be made, general truths will be arrived at, and a training will be given in exact measurement.

Diagrams and drawings by the teacher on the blackboard are valuable as means of giving interest to a lesson, but these should follow, not precede, the children's observations. The blackboard sketches should not be elaborate drawings. The fewer lines in them the better; each drawing should bring out only one or two points, for any elaboration will only distract the class.

When experiments are performed information should not be given as to what may be expected to happen; when the experiment has been carried out the children should be questioned and led to reason out for themselves what it teaches.

For successful teaching, the teacher's interest is the first essential. If instead of depending solely on books, he works at the objects himself saying "How can I kindle the interest of children in these? How can I awaken their curiosity and stimulate them to observe and enquire?" his teaching will be successful.

SCHEME OF OBJECT LESSONS.

Teachers should select their lessons from the following lists.—They should choose from the lists objects which are found in the district in which the school is situated, and are best suited to the ages of the children.

PREPARATORY CLASSES A AND B.

Common things.—Simple forms: sphere, cube, cylinder—illustrated by balls, pieces of sugarcane, pencils, *pickhari* (syringe), *banari* (flute), bricks. Colours: The children should be taught to distinguish the colours white, black, red, green, yellow and blue. The following should be used as illustrations: Flowers, coloured paper, cloth, wool, beads, and *churries* (bangles).

Common animals and birds.—Cow, goat, sheep, cat, dog, parrot, pigeon, *titar*.

Common fruits.—Guava, mango, orange, tamarind, ber.

Common articles of food.—Milk, water, bread, dal (lentil), ghee (clarified butter), dahi (curds).

CLASS I.

Common things.—*Takhti*, slate, knife, *khurpa* (hoe), *pharua* (spade), *khapra* (tile), *ghara* (pitcher).

Common animals and birds.—Buffalo, horse, camel, sparrow, *maina*.

Common crops.—Wheat, barley, gram, maize, rice, bajra, peas.

Common vegetables.—Sag (spinach), bhindi, gajar (carrot), muli (radish), potato, konhra (pumpkin).

CLASS II.

Common things.—Stamps, metals (iron, brass, copper), coins, clay, sand, sulphur, saw, chheni (chisel), barmi (borer), hal (plough), harrow, kohlu (sugar mill).

Common animals.—Elephant, monkey, fish, snake, squirrel, rabbit, frog (to be selected only if they are frequently seen in the locality, and if suitable pictures are available), peacock, crow, blue-jay.

Common trees and plants.—Mango, pipal, nim, tamarind, bamboo, cotton, castor-plant.

Reviews and Notices.

A SHORT HISTORY OF INDIA IN THE MIDDLE AGES, 1000—1764, BY DR. STANLEY LANE-POOLE, (BOMBAY: K. & J. COOPER). pp. 153. Price 4s. 14.

The author's ripe scholarship and vast store of knowledge about Muhammadan India places this book far above the general level of ordinary text-books for boys. There cannot be, for our High School students, a better account of the history of the Pathans and Moghuls in India than this small manual which condenses in its short compass all the merits of the author's larger book on the subject—'Medieval India under Muhammadan Rule.' The student is advised to read this book in connection with the same author's 'Source-book on Muhammadan India' issued by the same enterprising publishers a short time back, and reviewed in the January 1917 number of this journal. The narrative is at once simple, clear and striking and the salient features of Mussulman rule and civilisation in India are well brought out. The illustrations are among the finest ever produced in small books such as this and include specimens of the various types of Indian Mussulman coins. We commend this book heartily to the attention of both teachers and students in our High Schools.

DRAMATIC HISTORY OF INDIA—29 PLAYLETS—BY FLORA ANNIE STEEL. (BOMBAY, K. & J. COOPER). pp. 188. Price Re. 1.

This book gives us 29 remarkable incidents and stories of Indian History, each dramatised with vividness and set forth in picturesque and appropriate background. It is a fortunate circumstance that the gifted authoress has brought all her genius to bear upon this work—the first of its kind, so far as Indian History is concerned. The dramas must most effectively appeal to the imagination of school boys and enable them to realise what the incidents themselves must have been like. The dramatised incidents cover the complete range of Indian History from the coming in of the Aryans down to the Delhi Darbar of 1911. Some of the playlets are extremely moving and pathetic and grand in their simplicity. We may single out some, viz., the story of St. Thomas in the kingdom of Gundaphar, Princess Krishna Kumari, and the story entitled 'A Breathing.' The sweet harmony and simplicity of Aryan life, Chanakya's skill, Asoka's rectitude, the golden age of Samudra Gupta—these and many others are vividly brought into bold relief before our minds. The plays are written in simple dialogue form, and this will give our boys an opportunity of reading good English in simple form, whose value to young minds we cannot overestimate.

A PRIMER OF INDIAN ADMINISTRATION, BY L. F. RUSHBROOK WILLIAMS. (BOMBAY, K. & J. COOPER). pp. 140. Price 12 As.

This is a little book which gives us a summary outline of the growth and structure of the British Indian administrative system. Part I deals with the historical development of the system, takes us through the various phases of the Company's rule, and explains how Parliament gradually reduced the power of the Company to a shadow and paved the way for the assumption of direct authority by the Crown. The various Parliamentary Acts affecting India from the time of the Regulating Act are analysed clearly and briefly and brought up-to-date. The Government of India Act of 1912, and the Government of India Consolidation Act of 1915 are also briefly referred to. Part II of the book deals with the machinery of administration, with the Secretary of State and his Council, the Supreme Government of India and its various departments. The policy adopted towards the Native States, the

history of the judiciary, land-survey and revenue collection, the financial relations between the Imperial and Local Governments, the development of English education, municipal and local boards, etc., are also dealt with. The arrangement of facts is good, though not in any way striking, and the information given has been brought up-to-date and possesses both accuracy and clearness. The book will very well serve as a compendium of the subject-matter contained in the fourth volume of the *Imperial Gazetteer of India*.

A HISTORY OF INDIA FOR JUNIOR STUDENTS, WITH INTRODUCTION, BY L. F. RUSHBROOK WILLIAMS, (LONGMANS GREEN & Co., 1917). pp. viii. & 383.

The introduction of Professor Rushbrook Williams of Allahabad brings out the salient and commendable features of this book, viz., a presentation of the essential continuity of Indian history, the securing of a right proportion in space and stress between outline and details, and a simple clear style which is so necessary for a proper grasp of facts by young children. The book is bound to be very useful to the students and teachers of the lower forms of our High Schools for whom it has been specially intended. The growth of Aryan civilisation, and the superimposition on it of new creeds like Buddhism, Jainism, etc. and of new races and peoples like Bactrians, Parthians, Scythians, Huns, etc.—which constitute the basic factors of pre-Mussulman history—have been described with singular lucidity. The Moslem period has not received in some places, adequate notice, while a very short chapter dismisses the history of the Deccan and South India in a very few pages. The treatment of the British period is fuller, as it should properly be, and grows in detail especially after the Mutiny. And we have at the end an account of England's services to India, and of India's loyalty and gratitude to England in this time of war. The style and matter of the book combine harmoniously to help the teacher in instructing and the pupil in grasping; while 'the teacher's guide' put at the close of each section of the book will greatly assist him in oral instruction and revision. The book is bound to be valuable to the school world and the large number of maps and illustrations which are however not well executed add to its usefulness.

A SIMPLE HISTORY OF ENGLAND, BY A. D. INNES, WITH ILLUSTRATIONS AND MAPS. (BOMBAY: K. & J. COOPER). pp. 169. Price Re. 0-14-0.

The author, well-known as a writer of books on history, including among others, a very good

one on the history of British India, has written this small primer in very simple language for the benefit of boys in the lower forms of Indian schools. His main objects seem to be (1) the tracing in a continuous line of the growth of Britain and (2) the clear exposition of the growth in its various stages, of the British Empire. Striking titles make clear the subject-matter of some chapters. As instances, 'The Law Must Prevail' is the heading of the chapter dealing with the history of kings from Richard I. to Edward I.; and 'Across the Seas' gives us a good idea of the maritime expansion of England in the 17th century. As usual now, the later stages of the history have received comparatively fuller treatment than the earlier ages;—especially the wars and foreign relations of the 18th and the 19th centuries and their bearing on the growth of Empire. The growth of the German menace and the raging of the present war have also received some treatment. There are the usual useful accompaniments of genealogical charts, lists of guiding dates, and fine illustrations.

JATAKA TALES: SELECTED AND EDITED WITH INTRODUCTION AND NOTES, BY H. T. FRANCOIS, M.A. AND E. J. THOMAS, M.A. (CAMBRIDGE UNIVERSITY PRESS.) 7s. 6d. net.

This book contains a selection of 114 out of the 457 tales known as the Buddha birth-stories. An edition of the Pali Text of these was brought out by Professor Fausbøll, which was translated under the editorship of Cowell and issued by the Cambridge University Press in six volumes. The selections in this volume are taken from this translation with but minor modifications. The object of the editors of this selection is obviously to place these tales within the reach of those who may have neither the facility for, nor the inclination to, work their way through the six volumes of Cowell's translation.

The publication of the collection of the Jatakas has revolutionised current theories regarding the origin and provenance of folk tales. As in many another field the occurrence of similarities in the matter of single tales or of similar tales was held too generally to prove borrowing; and Benfey had made himself responsible for the impression that the Indian folk tales had their origin in Buddhism. The discovery of an older edition of the Panchatantra in the Tantrakhayika, and of the representations of several of these Jataka tales in the Bharhut Stupa took these tales back to a remoter antiquity and shook faith in the Buddhist origin of these. It is the work of Professor Franke in his 'Parallelisms between

the Jataka and Mahabharata' that forced the conclusion in upon folklorists that neither had borrowed from the other; but that both alike had used a common material available to them in the folklore of India. This work and Hertel's edition of the Tantrakhyayika made Benfy's position untenable, and took these tales back to a time long before the Greeks had come into touch with India by the invasion of Alexander. A new field has thus been opened to the comparative folklorist to work up how far the tales of the west could be given an eastern origin.

It is now coming to be recognised that the now famous Æsop was perhaps a Phrygian. The tales of various ages that go by his name collectively might have had a Phrygian origin proximately. That Phrygia and other parts of 'Asia' were in intimate contact, through Persia, with India seems demonstrable owing to the recent advance of research in Babylonian history. Although the first results of the publication of the Jataka tales had the seriously disappointing effect of showing that a similarity observable in a few cases from out of a large collection would hardly warrant conclusions in regard to origin and borrowing, the cumulative effect of various lines of investigation may at last establish that there was borrowing and that the credit and debit sides may have to change places.

The edition of the tales before us seems very well designed to help this line of investigation both by the handy and attractive form in which it is presented, and by the valuable notes attached to each story shewing the parallelisms and giving references to available sources of information. We have no doubt that the work will attract the attention that the subject deserves and will lead to fruitful lines of enquiry.

HOW WE LEARN, BY W. H. S. JONES. (CAMBRIDGE UNIVERSITY PRESS, 1916.) 1s. 6d.

This is a short primer of scientific method for boys of about sixteen leading the students themselves to a comprehension of 'the methods of discovery.' The author gives in very simple language the essentials of induction, deduction, recapitulation, evidence, classification, analogy, and such other means and aids to what may be called discovery, and shows how, for instance, the underlying causes of Malaria and Yellow Fever were found out by the application of these methods of investigation. The author has done well to draw the attention of teachers to the necessity of making students follow intelligently their work in class by opening their eyes at a stage early enough to the character of their

mental processes. This book together with the author's earlier pamphlet on *Scientific Method in Schools* may be confidently recommended.

THE DEVELOPMENT OF THE BRITISH EMPIRE, BY M. PROTHERO. (MACMILLAN, 1917.) 1s.

This is a small pamphlet well printed, well illustrated and well-indexed. It is suited to students in the higher forms and those outside class-rooms who do not know much about the story of the empire. The author's views on some matters, evidenced for instance by a *perhaps* that precedes a vague suggestion of his for the inclusion of India in a body similar to the Imperial Conference, are surely not likely to be acceptable to a large number of readers all over the empire, —but as a convenient summary in very small compass of the events that mark the growth of the empire the book is not likely to be without its utility. We may suggest to the publishers the translation of this pamphlet into Indian vernaculars.

HAND-WRITING, BY G. C. JARVIS B.A. (LONDON; GEORGE PHILIP & SON, 1916.) 1s.

FREE-ARM WRITING BOOK, BY G. C. JARVIS, B.A. (GEORGE PHILIP & SON, 1917.) 6d.

We congratulate the author of these two books on having successfully drawn the attention of teachers to the aims and methods of the teaching of handwriting. The two books are workman-like and deserve to be bought not only by every teacher but also by every one who is anxious to improve his 'calligraphy.' We cannot help saying, however, that the discussion of the underlying principles of the subject is inadequate,—though we do not fail to see that the author has had to adjust himself to the space at his disposal. We would like to see a work from the same pen which would take note of the results obtained, for instance, by Mr. Freeman in America, by the investigator of the Laboratory for Research in Experimental Psychology attached to Yale University, and by the Committee appointed a few years back by the British Association. Would some reader take pains to investigate the application of these principles to the writing of our vernaculars?

STORIES FOR CHILDREN, BY S. YAGNASWAMI, TOWN HIGH SCHOOL, KUMBakonam: 1. LALITHA, As. 4; 2. THREE BROTHERS, As. 4; 3. SHARAF KHAN, As. 3.

These booklets present moral lessons sugar-coated with fiction. Patience is rewarded, the

Indian Educational Notes.

Madras Teachers' Guild: Mathematics and Science Section.—The thirteenth meeting for the year 1916-17 of the section was recently held at Pachaiyappa's College with M. R. Ry, P. V. Seshu Aiyar Avl., B.A., B.L., Professor of Mathematical Physics, the Presidency College, in the chair. There were a large number of Mathematics teachers present. M. R. Ry, T. K. Venkatarama Aiyar Avl., M.A., L.T., Lecturer in Mathematics, Teachers' College, Saidapet, delivered an interesting lecture on 'the Mathematics Syllabus.' At the end of the lecture there was a discussion in which two or three experienced teachers took part. After the reply of the lecturer, the Chairman endorsed the view of the previous speakers that the evils in the present system could be remedied by teachers and teachers' organisations like the Madras Teachers' Guild.

A SUMMARY OF THE LECTURE.

At present there was considerable overlapping of the syllabuses. The result of such overlapping was firstly the lack of interest and efficiency. The lecturer was of opinion that the pupils had not deteriorated and that the general level of the teacher was higher now than 10 years ago. The range covered by a High School pupil in Mathematics was very small, and the time devoted over ten years. While we devoted about five years for Elementary Geometry, in America only one year was devoted for the teaching of as much and even more of the subject, about two years were devoted to the same subject matter at an English school. The evil in our system was due (1) to the want of aim in the school, and (2) to the mixing up of pupils who stopped their education when they left school, and of pupils who went up to a University. There was the same confusion in the lower forms between pupils who had to be content with Elementary education and pupils who could get or profit by a High School course. The resulting evils were lack of interest, inefficiency and needless strain on the better class of pupils, just those who should keep fit for a more strenuous University course. At present the generality of University men found the strain too much and left College with an aversion to further work of the same kind. The only remedy was for teachers, and what was more important, for parents to have definite aim for their boys at school, and not allow them to drift under some general curriculum.

Board Secondary School, Vriddhachalam.—The distribution of prizes to the successful pupils of the Board Secondary School, Vriddhachalam, came off on Friday, the 20th July 1917 with M. R. Ry, A. Seshagiri Rao Garu, B.A., B.L., District Munsiff, in the chair.

The function began with the reading of the report on the working of the school by M. R. Ry.

dignity of labour is enlarged on and intemperance is shown to be the precursor of manifold evils. Well,—educational ideals sometimes permit children to be inflicted with morality, and never protest against the assumption that children should be cautioned against such an adult vice as intemperance. Early impressions do not easily fade, it is true,—but boyhood or youth, and not childhood, is the fit season for such impressions to be indelibly engraved in the mind.

Though we are glad that the author has avoided much of *Punarchi* and often separated words that ought to stand independently, yet we cannot but express our regret that he has not gone far enough. Let us take this sentence, for example: *அவன் இவற்றையெல்லாம் காதில் போட்டுக் கொள்ளுகிறவனாகியான்.* (Sharaf Khan, p. 22). We wonder why 'போட்டுக் கொள்' which ought to be written together are split up, while *காதில்* and *போட்டு* which ought to be separated are brought together. It must also be clear that there is no valid ground for not giving either *எல்லாம்* or *இவ்வான்* an independent existence. The author does not stand alone in this attitude of halting reform. When will our writers recognise that reform that is half-hearted is never successful?

PUBLICATIONS RECEIVED.

The Story of the French Revolution, by Alice Birkhead, B.A. London: Harrap. 1s. 9d.

Stories of the Scottish Border, by Mr. & Mrs. William Pratt, London: Harrap. 1s. 9d.

Beginner's Botany in Tamil, by M. C. Rajah, Wesley College, Royapettah. 6 as.

Pictorial Grammar Lessons, by M. C. Rajah, Wesley College, Royapettah. 4 as.

Graduated French Dictation, by S. H. Moore, B.A. Cambridge University Press. 2s. 6d. net.

The Pronunciation of English, by W. A. Craigie, M.A., L.L.D. Oxford: Clarendon Press. 1s. 6d. net.

The Ripon Readers, Preliminary, 12 as.; Junior, Re. 1. Senior, Re. 1-4; Madras: Modern Printing Works.

The Story of Lord Kitchener, by Arthur O. Cooke. Oxford University Press, 8d. net.

Stories Retold: Sir Walter Scott's Kenilworth, abridged, by R. M. Spence, M.A. Oxford University Press. Re. 1.

M. Venkatarama Ayyar, B.A., L.T., Superintending Headmaster, who in the course of the report stated that in spite of the malarial climate of the place, the 1st Assistant in charge of the school M. R. Ry. S. Padmanabha Rao had been keeping up the strength and efficiency of the school in the highest possible pitch. The motto of the school "Life is duty" has been well followed by the staff of the school. He also thanked the Directors of the local Nidhi for their self-sacrifice in having made over their remuneration for the management of the Nidhi to the school. This they did towards meeting the net cost of the school and thus helped the Taluk Board in maintaining the Secondary School.

The prizes were then distributed to the pupils and a few scenes from Shakespeare's *Merchant of Venice* and *King John* were put on board. There were some choice comic recitations by the pupils of the school and one V. Srinivasan, a pupil of the III Form, was declared the best actor and reciter and awarded two special prizes. The Chairman

wound up the proceedings of the day with a short speech in which he said that the teaching profession was not considered as the best of professions and that the public did not treat the schoolmaster as he ought to be. He also expressed his pleasure in seeing pupils of an incomplete secondary school act 'Shakespeare' so well. He added that rich Natukottai Chettiars may well imitate the noble example of M. R. Ry. Dewan Bahadur S. R. M. M. Ramaswami Chettiar Avl. and endow the school with funds instead of building a spacious choultry at Vriddhachalam which does not meet any real want. M. R. Ry. K. Varahachariar Avl., the non-official Taluk Board President and some of the Taluk Board members were present on the occasion. The Headmaster thanked the President M. R. Ry. A. Seshagiri Rao Garu and M. R. Ry. K. Varahachariar Avl. for their kind words and the genuine interest they take in all educational matters, the Directors of the Nidhi for their self-sacrifice and the pleasant function was brought to a close with the distribution of sweets and *pan-supari*.

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The Educational Review.

It is significant of the widespread awakening of interest in educational matters in India that there should

recently have been an Educational Conference held under purely non-official auspices in Bombay. A striking feature of the movement was the intimate association between members of the educational profession and laymen. Sir Narayan Chandavarkar, who was for some time Vice-Chancellor of the Bombay University and who has always taken an abiding interest in education, presided and drew attention to some urgently desirable reforms in Indian educational policy. He struck at the root of the defects of higher education in India when he complained of the conditions in which the work is carried on in Indian colleges, and pleaded for a more wholesome atmosphere. The observance of racial distinctions in the higher ranks of the educational service and the studied exclusion of Indians from participation in the better kind of educational experience are undoubtedly circumstances which tend to bring down the efficiency and capacity for popular appeal of collegiate education in India. We should express our emphatic sympathy with the observation of Sir Narayan: "Since this unfortunate distinction between Europeans and Indians in their status as Professors, is it to be wondered at that the efficiency of University education has declined? I

do not say that it is the sole cause of the decline but it is undoubtedly partly the cause. Indians however able and distinguished have to work as professors in an inferior capacity. Under these depressing conditions, how can there be educational efficiency in the higher education imparted in our colleges and Universities? And observe the effect this system has had on University students. To be lectured on the one hand by professors in the class-rooms on the value of knowledge for its own sake, on the virtues of selflessness and so on, drawn from the studies from Shakespeare, Milton, Burke and Bacon, and to see within the precincts of the college a distinction between European and Indian in respect of the professorial staff without any regard for intellectual capacity, cannot but have a deteriorating effect upon their minds. What is the use of fulminating orders prohibiting students from attending political meetings, when you have politics of that invidious kind thrust on students in the very organisation of their colleges?"

It is gratifying to note the continued and increasing activity of the Educational Department of the Imperial Government, since the appointment of the Hon'ble Sir Sankaran Nair as Member for Education. The latest is a Conference of the Secretaries of the Students' Advisory Committees in the various provinces of India, with a view to co-ordinate the efforts in the direction of helping students proceeding to Europe.

electorates that have been formed for returning the fifty Fellows to the Senate are satisfactory, and the feature may very well be introduced even into the older Universities in India. There will be twenty Fellows elected by the teaching staffs of the colleges; five by graduate teachers of schools in which instruction is given to a standard to be prescribed by regulations; fifteen by a special electorate of graduates and the remaining ten by such associations or public bodies as the Chancellor may empower in that behalf.

The liberalising influence of a classical education has been drawn attention to from time to time in the columns of this journal, and we may be excused for reverting to it, in view of the adverse comments that have been roused by the present war, and the alleged disadvantages with which Britain has had to put up, owing to excess of attention paid to the classics in the past. A deputation of the Classical Association waited upon the Rt. Hon. Mr. Fisher, to safeguard the interests of the classics, in the reconstruction of English educational policy impending on the conclusion of the war. The Association demanded that in each area of accessibility for school attendance there should be at least one secondary school for boys and one secondary school for girls. In introducing the deputation, Viscount Bryce who has always been a powerful champion of the humanities, spoke on the great value of education in the classics in these words:

"There are some studies which do not present sufficient prospect of a definite pecuniary advantage to induce the average parent to desire that his children should be educated in them. They are nevertheless so essential to the highest conception of education and to the higher intellectual and moral life of the nation, that it is of great importance that they should be retained and due provision be made for them. The classics are such subjects, and while it is impossible to provide instruction in them in all secondary schools, some way must be found to discover the promising boys and girls who are likely to benefit by them, and to provide them with adequate teaching." In the course of a sympathetic reply, Mr. Fisher joined the deputation in a whole-hearted appreciation of the value of a classical training. "A study of classical antiquity," he had no hesitation in saying, "not only introduces us to some of the most beautiful literature in the world, but it has been a very living and progressive branch of intellectual study in the past generation." It is not difficult to see the bearing of the problem on the subject of Indian education—it must serve to draw attention to the important place that Sanskrit studies should occupy in any well-regulated scheme of Indian education.

It is with painful surprise that we note that when the whole country is awakening to a new life and liberal aspirations are finding unmistakable expression in every quarter, the Provincial

The Imperial idea in education.

Government of Burma should be thinking of reactionary measures of educational reform, of the most absurd and fanatic kind. They relate to what is called the development of the Imperial idea in schools and the suggestions in the direction have been put forward by a Committee appointed by Government. It is to be an attempt at preaching the glory of the British Empire to every student at school, as if true imperialism consisted in shrill praises of national achievement and not as Lord Rosebery said, in the realisation of the responsibilities of Empire. The Burmese Government has apparently yet to learn that artificial attempts at the teaching of loyalty in schools are bound to end in failure, as on a former occasion, when the Government of India prescribed Lee Warner's *Citizen of India* as a book for compulsory study in all secondary schools. The means suggested by the Committee for a realisation of the end are grotesque and provoking in the extreme and we hope the matter will receive the attention of Indian publicists, as Burma is a part of India, and in the absence of a highly developed political life in that province, a heavier responsibility rests on the rest of India. Its recommendations include, *inter alia*, the suggestion that the Principals of all Government High Schools should be officers of the Indian Educational Service; that the Superintendent or Headmaster of all Aided Anglo-Vernacular High Schools should be of British nationality and of a status equal to that of the Indian Educational Service; that practically every Normal school and European school should have on its staff a proportion of British subjects; and that

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the staff of the College in Rangoon, should have a proportion of men of British birth and so on. Our knowledge of educational affairs in this country, does not, we confess, include any proposals of this ridiculous nature and we hope to have heard the last of them.

The Rev. J. Knowles has been an indefatigable preacher of the value of the Roman script for Indian languages. Some of the advantages that will accrue from the adoption of the Roman script for the transliteration of Indian languages are apparent. It will serve to bring them into uniformity in writing; it will afford facilities for quicker, easier and cheaper printing; and it will bring the languages into line, at least as far as writing goes, with the languages of Europe. In a recent pamphlet, entitled "Our Duty to India and Indian Illiterates," the Rev. J. Knowles has put forward the arguments in a very cogent form and we commend the publication to the attention of all those interested in the question. Our readers must be aware of the movement obtaining in some parts of Northern India in favour of the *Nagari* script and we have no doubt that association with Sanskrit, a fuller capacity for the expression of the most varied sounds and its appeal to Hindu sentiment are powerful factors in its support, but we plead for a careful consideration of the arguments advanced by the author.

It is refreshing to note that annual reports of Indian Educational Statistics are not now being delayed so much as in former years and the report that has just been issued for 1915-16 is full of interesting matter. The following statistics will serve to draw attention to the main features of the progress that has been achieved in the country:—

The Educational Review

A Monthly Record for India.

VOL. XXIII.

AUGUST 1917.

No. 8.

All literary contributions, books for reviews, newspapers or magazines, sent in exchange, &c., should be addressed to the Editor, No. 4, Mount Road, Madras. Articles and communications intended for publication in the succeeding issue should, as far as possible, reach the Editor not later than the 20th of the month. The Editor solicits contributions on all subjects of educational interest. Stamps should accompany the MS., if the writer wishes it returned, in case of non-acceptance. The Editor can in no case hold himself responsible for accidental loss.

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THE EVOLUTION OF HINDU POLITY.

From the Vedic to the Chāṇḍīyan Times.

II.

(Continued from page 9.)

A few words may be said about the actual details of the coronation* itself, and then the solemn nature of the ancient ceremonial will be adequately grasped. Before it commenced, all the symbols and implements of royalty† were brought. These consisted of a throne made of the *Udambara* wood and "successive helmets of

* The details are taken from the *Aitarēya Brāhmaṇa*. An equally elaborate and, according to some, an earlier account is given in the *Krishṇa Yajur Veda*, I.8.10—14. See also *Rig Veda*, X. 173, *Atharva Veda*, IV. 8 and *White Yajur Veda*, IX. 39.

† The *Krishṇa Yajur Veda* describes a peregrinating divine service which the king has to do, before the beginning of the coronation, in the house of the chief Brahman, the chief Kshatriya and the Ratnins. He has also to invoke Mitra and Brihaspati for the proper conduct of the ceremony. See I.8.10 for details.

the length of half an arm, cords for binding made of muñja grass, a tiger skin for covering the throne, a large ladle of *Udambara* wood and a (small) branch of the *Udambara* tree." A small quantity of curds and honey, of ghee and rain-water fallen during sunshine, of young sprouts of grass and green barley, of liquor and *dūrva* grass, was then placed in the ladle. The *Aitarēya Brāhmaṇa* tells us why these substances were chosen for the ceremony. It says that the throne and the ladle are of the *Udambara* tree, because that tree is a substance which can impart the greatest vigour and nourishment to the chief. The rain-water* fallen during sun-

* The *Krishṇa Yajur Veda* mentions various liquids,—sea-water, river-water "taken from progressive and retrogressive waves, well-water, water from the whirl-pool, rain-water fallen during sunshine, clear water on which the solar disc is reflected, stagnant water, dew-water, milk," curds, ghee, honey, etc. These are addressed as bestowers of glory on the Kshatriya. See K.Y.V. I.8.12. After the king is purified by the sprinkling with these waters, he is given a robe and a diadem, after which the ceremony begins.

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AREA AND POPULATION.				PUBLIC INSTITUTIONS.												PRIVATE INSTITUTIONS.			GRAND TOTAL
Total area in Square Miles.	Number of Towns and Villages.	Population.	Particulars.	UNIVERSITY EDUCATION.		SCHOOL EDUCATION, GENERAL.				SCHOOL EDUCATION, SPECIAL.				Advanced.	Elementary.	TOTAL.			
				Arts Colleges.	Professional Colleges.	Secondary Schools.	Primary Schools.	TOTAL.	Training Schools.	All other Special Schools.	TOTAL.								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
	Towns* . 1,456	Males. 124,190,672	Institutions.	136	50	6,632	120,858	127,490	684	4,169	132,529	2,403	33,787	36,190	168,719				
	Villages. 533,112	Females. 118,812,827	For Females	11	2	640	17,231	17,871	92	696	18,672	16	1,841	1,857	20,529				
			TOTAL	147	52	7,272	138,089	145,361	776	4,865	151,201	2,419	35,628	38,047	189,248				
			Scholars.																
			Males	45,349	9,540	1,034,898	4,645,046	5,679,944	15,327	121,024	5,871,184	51,982	508,049	560,031	6,431,215				
			Females	469	131	93,505	993,198	1,086,703	2,405	22,316	1,112,024	1,873	72,384	74,257	1,186,281				
	TOTAL . 534,568	TOTAL 243,003,499	TOTAL ...	45,818	9,671	1,128,403	5,638,244	6,766,647	17,732	143,340	6,983,208	53,855	580,433	634,288	7,617,496				

1,032,011

shine, it says, represents the splendour and lustre of sanctity. The young grass and barley represent the king's prosperity and progeny. The *Darva* grass, the king of herbs, represents the *Kshattria*, the firmness of sovereign power. When these things are ready, the throne is placed on the southern side of the *Vēdi* with two of its feet upon it and the other two outside, so as to denote both the earthly and spiritual ambitions of the monarch. A tiger-skin is then spread upon it, as the tiger is the wielder of the *Kshattria* or royal power in the forest. The king then approaches the throne from behind, kneels down before it so that the right knee touches the earth, and holding it with his hands, addresses hymns of prayer to the Gods Agni and Savitar, Sōma and Brihaspati, Mitra and Varuṇa, Indra and the Vis'vādēvas, to ascend the throne first, so that they will enable him, when he occupies it, "to be ruler, to be great ruler, to be an universal ruler, to obtain all desires fulfilled, to be an independent and most distinguished ruler." With the recitation of these mantras* the chief ascends the throne, and when the priest, immediately after, sprinkles water upon him, he has to say: "Look upon me, ye waters, with a favourable eye! Touch my skin with your happy body! I invoke all the fires which reside in the waters to bestow on me

* The details are slightly different in the *Krishṇa Yajur Vēda* at this stage. The king, for example, has (after ascending the seat) to kick a piece of lead, the symbol of unmanliness, and a piece of copper, the symbol of sin. Another point noted in the same work is the sprinkling of the holy waters not only by the priest but by a *Kshattriya*, a *Vais'ya* and "a friend from among the people." The *Krishṇa Yajur Vēda* version is more democratic than that of the *Aitarēya Brāhmaṇa*. For an *Atharva Vēda* hymn relating to the sprinkling of the sacred mixture of liquids, see *Atharva Vēda*, IV. 8, quoted in *Ind. Review*, June 1902.

splendour, strength and vigour." They now place the branch of the *Udambara* on the chief's head and pour the liquids which are in the ladle upon it, saying: "Be the ruler over kings in this world! Thy illustrious mother bore thee as the great universal ruler over great men; the blessed mother has borne thee! By command of the divine Savitar I sprinkle thee with the arms of the As'vins, with the hands of Pushan, with the lustre of Agni, the splendour of Sūrya, the power of Indra, that thou mayest obtain strength, happiness, fame and food." The last item in the ceremony is the drinking of a goblet of spirituous liquor, a portion of which is given, as a symbol of mutual friendship, to the priest!

The *Punarabhisheka* ceremony is now over, and the consecrated chief descends from his throne, and proclaims his new position in the following words: "I stand in the heavens and on the earth; I stand in the air exhaled and inhaled; I stand on day and night; I stand on food and drink; I stand on *Brahma*, *Kshattria* and the three worlds." Finally, he says, he stands firmly through the *Sarvātma* who is the cause of all things. A finishing touch to the whole ceremony he then gives by making an adoration and an offering to *Brahma** "for the attainment of victory in general, of victory everywhere (*abhiṣṭi*), of victory over strong and weak enemies (*viṣṭi*), and of complete victory (*saṁṣṭi*)."

* Notice the fact that the Brahman sits below the *Kshattriya* in the course of the sacrifice and renders obeisance, for "there is nothing higher than the *Kshattria* power;" while, after the attainment of supremacy, the king has in return to resort to the *Brahma* power as it alone is the source of his *Kshattria* power. See the *Bṛihadāraṇyaka Upanishad*, (I. 4. 11-14) quoted in *Ind. Review*, June 1902, p. 279, and also the *White Yajur Vēda*, IX. 39, quoted in *Dutt's Civilization*, Bk. II, Ch. 4.

The *Aitarēya Brāhmaṇa* concludes its description of the *Rājasūya* ceremonial with a description of the singular performances which devolved on the king* for the attainment of victory in war and of plenty and prosperity in peace. This part is interesting for the fact that even in military undertakings the king was not left to himself, but had to be helped by the priest. The latter accompanied him even to the field and was not unoften asked to make the king win the battle. If the king is defeated, he has to resort to the priest, again, for making him return to his dominions. The whole is a fine example of the utter subjugation of the soldier to the priest, of the man of action to the man of God. It is not surprising that the king had to enlist the co-operation of the priest for other important but peaceful purposes. The priest's offerings of melted butter to Indra alone could bring the king freedom from disease, from loss, and from danger, and increase his wealth, his cows, his horses and his progeny. Those who make the king indifferent to the priesthood are therefore, says the *Aitarēya Brāhmaṇa*, like those who "kill him, drag him away, and deprive him of his property, just as the most degraded of men (*nishādas*), robbers, murderers, seize a wealthy man in a forest and after having thrown him into a ditch, run away with his property." King *Janamējaya* himself proclaims that his conquests over hostile armies, his invincibility to divine and human arrows, his full span of 100 years and his mastery of the earth were the results of his dependence on Brahmanical knowledge even though he

* See also *Krishṇa Yajur Vēda*, I. 8. 15 for certain ceremonies in this connection. They include a symbolical expedition on a chariot, a symbolical assumption of monarchical might by walking on a pair of slippers made of the skin of the wild boar, and a symbolical bearing of the burden of the three worlds by the fastening of three metallic balls on his shoulders.

was himself a past master in it. (*Aitar. Brāh.*, II. 514).

The *Aitarēya Brāhmaṇa* describes another ceremonial of royal inauguration called the *Mahābhisheka*, the object of which is not clearly distinguishable from that of the *Punarabhisheka* described above. The *Mahābhisheka* however is supposed to have been the mode in which Indra was inaugurated as the supreme sovereign of the gods, and seems to have been intended as an effective method of attaining pre-eminence among the rulers of the land. In this ceremony Indra is enthroned not on a throne of the *Udambara* wood but on a *Rik*-formed seat with the *Brihat* and *Rathāntara* verses for its fore-legs, the *Vairūpa* and *Vairāja* verses its hindlegs, the *Sākvara* and *Raivata* verses its top-boards, the *Naudhasa* and *Kāleya* its side-boards. The *Rik* verses are said to have been made the threads of the texture which went lengthwise, the *Sāmans* the threads which went cross-ways, the *Yajus* verses the intervals in the texture. The goddess of glory is the covering for the throne, the goddess of fortune its pillow. Savitar and Brihaspati held its fore-legs, Vāyu and Pushan the two hindlegs, Mitra and Varuṇa the two top-boards, the As'vins the two side-boards. This spiritual throne Indra ascended after calling the various Gods—the Rudras, the *Ādityas*, the Vis'vādēvas, the *Sādhyas* and *Āptyas* and the Maruts, to bestow upon him their graces and their powers. Immediately after he is seated, he is formally proclaimed sovereign and then the consecration ceremony begins. He is first inaugurated for a space of 31 days in the eastern direction for the sake of obtaining the *Sāmrajya* or universal sovereignty, a precedent from which arose the custom of inaugurating "all kings of eastern nations in the eastern regions" as *Sāmraṭs*. He is then inaugurated for an equal period in the southern region for obtaining enjoyment. Hence, says the *Brāhmaṇa*, "all kings of living creatures in the southern region are inaugurated for the

enjoyment (of pleasures) and called Bhoja, i.e., enjoyer." The third stage is the inauguration in the western region, the object and effect of which is independence. "Hence all kings of the Nīchyas and Apāchyas in the western countries are inaugurated to independent rule and called independent rulers (Svarāts)." Next, the inauguration takes place in the north, where it is supposed to bring Vairājya, that is, distinction, according to some, and the capacity to suppress self and acknowledge the sovereignty of the people, according to others. "Hence all people living in northern countries beyond the Himalayas such as the Uttarakurus, Uttaramādras, are inaugurated for living without a king and called *Virāj*, i.e. without king." Lastly he is inaugurated in the middle region, the centre and stronghold of kingship or Rājya, and so "the kings of the Kuru Pāṇchālas, with the Vatsas and Usīnāras, are inaugurated to kingship, and called kings or *rājas*. As a result of this many-sided inauguration Indra becomes a universal conqueror and ruler, a sovereign who combines in himself all the virtues and powers of a Sāmrāt, a Bhōja, a Svarāt, a Virāt and a Rāja.* That is why the Kshattriya has to be inaugurated in that ceremony by his priest.

As regards the actual ceremony of anointment I don't believe it necessary to go into details. What I have said in connection with the *Rājasūya* is enough for our purpose as it is based on the same principle and inspired by the same ideals. Here it may be pointed out, however, that the whole ceremony seems to have been based on the principle of responsibility to the people. Even in the Agnishtōma ceremonial preliminary to the *Rājasūya* it is clearly laid down that 62 stōmas should be used, 9 to represent the Brahma, 15 to represent the Kshattria, 17 the Vaiśyas and 21 the Sūdras, so that the king could respectively obtain the fruits of splendour, strength, off-

* See Dutt's *Civilization*, Bk. II, Chap. 4.

spring and a firm footing. The same principle of dependence on popular support is illustrated in a more glaring manner in the Mahābhishēka ceremony. For before its actual performance the king has to take this remarkable oath: "Between the night I am born and the night I die, whatever good I might have done, my heaven, my life and my progeny, may I be deprived of, if I oppress you." (Aitarōya Brāhmaṇa, VIII. ch. 4). Deposition of an irresponsible sovereign is thus legalized, and the safeguard is all the more remarkable for its being insisted on in the Mahābhishēka—not the Rājasūya-ceremonial.

Such were the moral and spiritual restrictions to which monarchy came to be subjected in the age of the Brāhmaṇas and the Āraṇyakas. The formulation of these restrictions seems to have been accompanied by the definition of the royal functions and responsibilities as well. The most important of these functions was his leadership in war, or the practice of the Kshattradharma as it was called, for the safety of the realm. The king had, in this capacity, to provide for the military defence of the realm, to appoint generals, to erect forts, to ascertain the strength of neighbouring powers through spies, and to look after, equip and train the armies which, from this time onward, came to be in the fourfold divisions of the *Rathagaja-turagi-pātati** (रथगजदुरगपताति). An elaborate multiplicity of military duties, in other words, were introduced; and the necessity for this will be easily seen when it is remembered

* The *Ratha* is very commonly referred to in the Rig Veda itself. The war-horse was so highly regarded that, under the name *Dadhikra* it was an object of worship. See R.V. IV. 38 for a spirit-ed hymn in connection with this. The elephant is referred to as being ridden on by the king and his ministers, but it has been doubted by scholars whether it was employed in war. See *Ibid*, IV. 4. 1. The foot soldiers were of course the most numerous in the army.

that the wars of the nations of Hindusthān were fought on a much grander scale than the tribal wars of the Vedic age, and that the king had to be equal to a tremendous change in the systems and methods of warfare. The second function of the king, as defined in this period, is denoted by the term *Dushta-nigraha-s'ishtaparipālana* (दुष्टनिग्रह शिष्टपरिपालन), that is, the punishment of the wicked and the protection of the good. This was a comprehensive term used in those days for the two modern departments of the police and justice, the former for providing peace and order, the latter for safeguarding the law of person and property. The king's police officers whose function of course was to execute sentences and arrest offenders and who, as I have already pointed, were known as the *Ugras* and the *Jiragrabhs* in the Rig Veda, were later on to be entrusted with a more solemn responsibility in the form of the extraordinary regulation that when a person lost his property by theft he had to be compensated from the State coffers in case the thief was not caught. The idea was that the loss of property was the outcome of royal neglect or defective police arrangement and the latter had to pay the penalty.

With regard to the administration of justice the great point we have to note is the realisation on the part of the crown and people of its necessity and purity. In a passage of singular interest the *Bṛihadāranyaka Upanishad** tells us that the successive creations of the Brahma power, the Kshattria, the *Vis* (free people) and the Pushan (i. e. Sūdra as nourisher) did not suffice to the prosperity of the State and that therefore justice was created. "That which is justice is the

* See the *Ind. Review*, June 1902, p. 279, and Dutt's *Civilization*, Bk. II, chap. 7. The latter gives the word *law* in place of *justice* in the above extract. As Dutt points out, "no nobler definition of law has been discovered by all the jurists in the world."

Kshattria of the *Kshattria* (that is, it is a sovereign power over all sovereignty). Therefore there is nothing higher than justice. Thus it is by means of justice, as through the instrumentality of the king, that the weaker man controls the stronger. Verily whatever is such justice is truth. Therefore they say that the man who declares truth declares justice. Similarly they say that the man who declares justice declares truth. Indeed this (one) only constitutes both of these." The same lofty feeling is reflected in the admonition which the 'Sukla-Yajur Vēda administers to a would-be king. "If there shalt be a king," it says, "then from this day, judge the strong and the weak with equal justice; resolve on doing good incessantly to the public and protect the country from all calamities." I have shown how in the Vedic period the assembly inquired into legal cases and discharged the duties of a court. In the epic period the assembly ceased to be a judicial body, its function being taken over by the king or special judges appointed by him. The Atharva Vēda gives an evidence of the royal delegation of judicial authority in the appointment of a *Sithapati* or chief judge*, an officer second only to the king's brother in the State. The next development in the judicial administrative machinery was the introduction of assessors to sit with the king or his judges and pronounce decisions. The appointment of assessors was, it is natural to believe, optional at first, but by the time the Sūtrakāras composed their manuals, came to be considered a necessary factor. In any case, even when the king appointed special judges, he was in theory the head of the judicial administration. To the people he alone was the fountain of

* This officer figures for the first time in the Atharva Vēda. He is considered by some to be governor, but by others to be chief judge. "As in the case of the early English judges, his functions may have been both executive and judicial." (*Vedic Index*, Vol. II, p. 486.)

justice. His court was open to every man, he could be petitioned to by any-body for the redress of grievances, he was accessible to all and could hear complaints against oppression and injustice. In criminal administration, in particular, he was the supreme authority; in civil cases he was guided by specialists.

As regards the *method* of judicial administration there were certain important developments in the Brāhmaṇic period. All punishments came to be regulated in accordance with the *Dandanīti* to which a divine origin was attributed. The penalties for breach of law, in other words, came to be based not on the uncertain caprices of the monarch, but the divine mandates of the *Danḍa-nīti*. Himself an *adaṇḍya*, or exempt from punishment he could inflict the *Dhaṇḍavadhā* on others.* As regards the actual procedure in courts, Messrs. Macdonnell and Keith infer, from the list of the victims at the *Purushasamēdha* (who included a *Pras'nin*, an *Abhipras'nin* and a *Pras'navivāka*) that the regular establishment of a plaintiff, a defendant and a judge was known even then. Still judicial procedure seems to have been as crude as in the Rig Vedic epoch. The use of witnesses, for instance, was not yet understood; and the unsatisfactory method of *दण्ड* or ordeal was the common method of adjudication. It is difficult to say when exactly the ordeal system was introduced. According to Geldner, Ludwig and Griffith the system had come to prevail in the time of the Rig Veda itself. Weber, Zimmer and others, on the other hand, seem to think that it came into vogue in the age of the Atharva Veda. Still others like Grill, Bloomfield

* The '*Satapatha Brāhmaṇa*, V. 4, 4, 7 as quoted in the *Vedic Index*, Vol. I, p. 338. The something was later on expressed by the *Pāraskara-Grhya-Sātra* in the phrase *राजप्रेषितोदण्डः*! The *Danḍa*, it may be noted, was not only the symbol of temporal power, but of spiritual initiation.

and Whitney would ascribe it to a later period. In any case its existence in the age of the Brāhmaṇas is indisputable. The *Pañchavim'sa Brāhmaṇa*,* for example, refers to it. The *Chāṇḍōgyopanishad*,† again, gives this description of the fire ordeal as it was enforced in the case of a theft:—

"They bring a man hither whom they have taken by the hand, and they say, 'he has taken something, he has committed theft'; (when he denies they say) heat the hatchet for him. If he committed the theft then he.....grasps the heated hatchet, he is burnt and he is killed. But if he did not commit the theft then he.....grasps the heated hatchet, he is not burnt, and he is delivered."

The punishment of guilt was usually by fine or *Vaira* as it was called, reminding the student of history of the Anglo-Saxon *Weregild*. The Rig Veda seems to imply that a man's *weregild* was 100 (cows?); for it gives him the epithet *Satadāya*. The same equation of values is given in the *Yajur Veda* and the *Aitārēya Brāhmaṇa*. The fixing of this price, say the compilers of the *Vedic Index*,‡ "shows that already public opinion, and perhaps the royal authority, was in Rig Vedic times diminishing the sphere of political revenge; on the other hand the existence of the system shows how weak was the criminal authority of the king." Both the later *Samhitās* and the Brāhmaṇas contain ample reference to the system of *Vaira*.

Besides the defence of the country and the maintenance of its security, the king of this period came to be looked upon as responsible for the moral and material welfare of the people.

* XIV 6, 6.

† See Dutt's *Civilization*, Bk. II, ch. 7 where it is quoted. The *Satapathā Brāhmaṇa* describes, according to Weber, the *tulā* or balance ordeal; but it has been questioned by others.

‡ *Vedic Index* II, p. 332.

Again and again we are told in the Brāhmaṇas and Upanishads how kings competed with each other in holding Parishads of learned men, in discussing moral and philosophical questions, in encouraging the numerous forest universities of the country. No rewards of lands and cows were considered sufficient for men who displayed their learning in the courts or employed it in the service of the people; and no more beautiful pictures exist in the world's literature than those Upanishadic scenes where the kings and sages, princes and other Āryan youths, mingled freely and equipped themselves with the qualifications for their avocations both of this life and of the life to come. Placing themselves under the advice of the intellectual and spiritual aristocracy of the land the monarchs of the age came to believe as much in the moral and intellectual spheres of their duty as in the worldly and material aspects of it. The way was thus paved for the discharge of those functions which, as the guardian of the religion and morals of the State, the censor of social organization and the patron of learning and culture, the monarch came to exercise in the Sūtra period, making himself thereby the preserver of all civilization.

(To be concluded).

V. RANGACHARIAR.

In Active Preparation.

COLLEGE ALGEBRA

A Text-book for the Intermediate and
B.A. Classes

BY

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Srinivasa Varadachari & Co., Madras.

AMERICAN HELP FOR INDIAN STUDENTS.

AN Indian student planning to enter a college in America has many questions to ask. He wants to know: What University shall I choose for my education? How many years will it take me to get my degree? Where shall I find suitable accommodation? These and many other questions, which confront a prospective student are cheerfully answered by the Hindusthan Association of America.

The Association is a voluntary organization with branches at most of the leading centres of education in America. The President of the Society, who has an intimate knowledge of the conditions of life in different parts of the Republic, conducts an un-official bureau of information. He, with the assistance of other officers, makes it his business to collect data from various Colleges and Universities concerning their educational facilities. And when a student applies for advice or information, the President helps him the best he knows how.

A notable instance of the desire of the Association to render efficient service to Indian students is seen in the founding of a Loan Fund. Since the resources of a student may sometimes run short toward the end of the college year, or his allowances may fail to reach him from home on time, the Society tries to tide him over a hard period by a little advance of money. For lack of proper financial support this phase of the work, however, is not so well developed as it might be.

No one need imagine from this that the Hindusthan Association is a charitable organization engaged in giving away money to needy people. It has no money to give, although it has some to loan. The Association is only prepared to furnish gratis all the information that bona fide students in India may desire. The cost of living is now so high in the United States that no one should think of coming here without a steady allowance from home of, at least, a hundred rupees a

month. The days when a student could earn his way through college are gone. Under the new Immigration Laws, no student from India will be allowed to land in America who has not a visible source of income from Hindusthan.

It may be mentioned in parenthesis that the Association is most emphatically an educational, not a political, organization whatsoever. From my personal knowledge of the workings of the Association as its first ex-President, I can affirm with utmost certainty that the ends and objects of the leaders of the movement are simply and solely to look after the interests of the Indian students, and that the Hindusthan Association with its score or more of branches is strictly a non-sectarian, non-partisan, and non-political body.

The Association is not only promoting the educational interests of Indian students in the United States, but it is doing a splendid missionary work in fostering cordial relations between America and India. To this end, the local chapters give public programs and enlighten American audiences on the present-day conditions in Hindusthan. Sometimes, the representatives of the Association visit other clubs and societies, and discuss Indian culture and civilization from the angle of an Indian. Moreover, the central organization of the Society, which has its own printing plant, publishes a monthly periodical known as *The Hindusthanee Student*. Just now the enterprising editor of *The Student*, A. C. Chakravarty, has published a useful pamphlet known as "Education in the United States of America." It gives valuable information on such subjects as American system of education, the best way to come to America, cost of living, leading American Colleges and Universities, medical education, dress and equipment, and other related topics. The book can be had from the editor of *The Student*, Urbana, Illinois, for 24s. 6p. Publications, such as these, help to interpret India to America and America to India. They inevitably tend to roll away misunderstandings, and pave the way to mutual appreciation of Indian and American life.

Perhaps the greatest single achievement of the Association was the International Hindus-

thanee Students' Convention held under the auspices of the Panama-Pacific International Exposition in San Francisco, 1915. The Convention, which had a three-day session, met right in the famous Festival Hall of the Exposition. It is also a matter of patriotic pride to note that the Hindusthan Association was instrumental in securing an Indian booth in the Palace of Varied Industries on the Exposition grounds. Here were exhibited works of high-class Indian arts and industries. Never before in the history of international expositions had Hindusthan taken such an independent part among the nations of the world. To be sure, India had some share in the World's Fairs at Paris and at St. Louis; but on those occasions India was not represented by the Indians and for the Indians. India was made to appear as a tail to somebody else's dog. In the Panama-Pacific Exposition India appeared on her own account. And as a fitting recognition of the role played in this great festival of nations, the Hindusthan Association was presented by the Panama-Pacific International Exposition with a commemorative bronze medal. Indians in America can now lift their heads high in pride and greet the world as men.

Such, in brief, are some of the activities of the Hindusthan Association. It is now peculiarly fortunate in having Doctor Rafiuddin Ahmed as its President. Doctor Ahmed, who is employed in the responsible position of a dentist in the Forsyth Dental Infirmary of Boston, is a tireless worker for the welfare of Indians in America. He places the services of the Association unreservedly at the disposal of those who may need them. They are yours for the mere asking "The Hindusthan Association," said President Ahmed to me the other day, "is simply another phase of the cosmopolitan instinct of the Indian granary of knowledge to be ransacked in order to usher in the India of to-morrow. To accomplish this we need the active help of our people at home. Send out students, more students, and yet more students; there is room for them all in American Universities."

IOWA CITY,
U. S. A. }

SUPRINDRA BOSE.

COMPULSORY PRIMARY EDUCATION, BOMBAY.

Council Discussion on Mr. Patel's Bill.

THE twenty-sixth of July 1917 is a memorable day in the history of Primary Education for the masses in India. On that day the Hon'ble Mr. Patel's Bill, which may be called a smaller edition of the late Mr. Gokhale's Bill of 1911, was read in the Bombay Legislative Council for the first time and passed unanimously, without a single dissentient voice, in the Council Hall, Poona. It is very likely that other provinces will follow suit. The Hon. Mr. Krishna Rao of the Madras Legislative Council has already given notice of his intention to move a similar Bill in that Council and the Punjab Government has declared its intention of introducing a Government Bill for the same purpose. Now that the Government of India has recognized that the principle of compulsory attendance of children at school, for the benefit of themselves, the community and the State, may be adopted, wherever people are ripe for it, it is proposed to be adopted in more advanced Municipal areas. India is a country of villages, not of towns like several European countries, and the urban population in this country is only 9.5 of the total population. But a small beginning is safer and takes deeper root than a beginning on a large scale and over a wide area. The urban population in Bengal is 6%, in Madras 12%, in the U. P. 10% and in Bombay 18% of the respective total population in those provinces. Compare this with the state of things in England and Wales and Germany, where the population in towns is as high as 78.1% and 45.6% respectively of the total population in those countries. And even of the small proportion of the urban population in Bombay Presidency the proposed legislation will affect only one-half—girls will not be compelled to go to school until a sufficiently long trial is given in the case of boys—but the beginning has been made. Mr. Gokhale's spadework has borne

fruit, and well may his soul rejoice that his life-mission is on the way to fulfilment, though this happened not in his own life-time, but two years after his demise. It is now for the people—for voters in Municipal towns and their representatives on Municipal Boards—to enthusiastically take up the work of introducing and popularizing school attendance and to resort to compulsion in the last resort in a few cases. The people of India are proverbially meek and law-abiding and it is hoped that as in Japan, voluntary agencies will come forward to persuade and encourage ignorant people to send their children to school without being compelled to do so. The Bill will take about six months to pass, and the interval may be utilized by our Municipalities in preparing schemes with estimate of cost and finding ways and means of working the would-be Act in their respective towns, first for boys and then for girls. Public opinion in favour of a new principle always precedes State action in that direction. The State has now advanced from the stage of opposition or rather non-recognition of compulsion to that of benevolent neutrality; it is now for leaders of public opinion to lead the State and its machinery to the further stage of enthusiastic co-operation with the people's desire for voluntary compulsion not only in urban but also in rural areas, and finally into the stage of universal education by full compulsion for boys and girls alike of the age 6 to 12—whether living in a Bombay mansion or a Calcutta palace or the meanest hut in a hamlet in the forest of Khandesh, the Central Provinces or the Himalayas. Let us have bands of educational missionaries going about from village to village preaching the gospel of education for the masses—for our teeming millions, and carrying to our village-brethren that 'keener enjoyment of life and a more refined standard of living' that will assuredly follow in the train of even elementary education.

THE TWO ANGLES OF VISION.

It was a lovely sight to see one non-official

revenue of over 800 lacs, specially when the expenditure will be distributed over a period of 5 to 10 years?

MAHOMEDAN ATTITUDE.

The attitude of Mahomedan members was as encouraging and optimistic as that of other Indian members. With the solitary exception of Khan Bahadur Pir Baksh every Mahomedan Hon. Member spoke in favour of the Bill. The official members, who spoke on behalf of Mahomedans, seemed more Mahomedanised than the Mahomedan members themselves. The Hon. Mr. Lawrence went to the length of saying that even the Hon'ble Mr. Jinnah opposed the late Mr. Gokhale's Education Bill in 1912 in the Indian Legislative Council. This has since been contradicted by Mr. Jinnah himself. The Moslem members cordially recognised that the Compulsory Act would do far greater good to the Mahomedan community than to other advanced communities like the Hindus. Indeed, all backward classes stand more to gain than the advanced classes and must welcome the present Bill more cordially. The proposed measure will be a potent factor in levelling down caste, in uplifting the down-trodden and the depressed, and affording opportunities so far denied to them. Of course, the measure when passed, will not open a new educational heaven, as the *Times of India* remarked recently, but decidedly it will bring a new ray of light, where at present only dismal darkness prevails.

A. V. THAKKAR.

CLOUD MESSENGER.

A Critical Appreciation of Kalidasa's *Moghasandesha*

By RAO BAHADUR M. RANGACHARYA, M.A.,
late Professor, Presidency College, Madras.

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A DAY AT THE MULTAN GURUKULA.

A MILE and a half north of the Lohari Gate (Multan) is the Huzuri Bag, that well-known temple and *tirtha* of the *Hemapanthis*. Close to it loom high two beautiful bungalows, one yellow and the other green. These are the buildings occupied at present by the Gurukula. They may strike you as uneducational, built neither on modern school plans nor on ancient academical models. They do not belong to the Gurukula. The President, Managing Committee, has lent his residence at a nominal rent to this his darling institution. The Gurukula has bought land to the south of the city, and when funds are ready, it will raise its own house, suited to its own requirements.

Hostel.—The green *kothi* to the west is used as hostel or *ashram*. To each class is allotted a room or a set of rooms in which *takhtas* or wooden bedsteads are ranged. Couches, whether of cane or of any other flexible material are regarded as too soft, and are forbidden. For says the Upanishad:—*उपरिश्रयां वर्ज्यम्* | 'Avoid a high (soft) bed.'

The furniture of the rooms is very simple. There is neither chair nor table. The boys sit and read on the same *takhtas*. They have small desks to lean on. In college classes at Kangri, chairs and tables are provided, but there, too, the seat is of wood. Each *Brahmachari* has got a *lota*, which he carries with himself during the varied round of his *ashram* duties. He wears wooden sandals instead of leather shoes.

Morning routine.—Waking time is 4 a.m., when *Brahmacharis* get up and go out, under the supervision of teachers, to a distance of

about a mile. In an hour they return to take exercise, such as *dand*, *baithak*, race, etc. Then follows bath. In the north of the *ashram*, is a well, to which a long cistern is attached. In colleges, water flows out of tubes, but here the *Brahmacharis* fill up their *lotas*, and pour water on their heads, rubbing their bodies meanwhile. On both sides of the cistern, the floor is paved. When short of clothes, owing to the washerman's delay, they wash their *dhotis* and *kurtas* here. One makes fire; another brings in a pan. Water is boiled and *sajji* put in. Like washermen they stir the clothes with sticks. The dirt gradually gets loose. Now is the time to shake it off. Plash! Plash! They beat the clothes on the floor. The process, very pleasing and instructive, goes on for an hour or two. It combines amusement with diligent labour. It is during such well-planned hours of assiduity that habits are formed of self-confidence and co-operation, and a spirit of sincere sympathy gradually replaces the deep-rooted disdain, found among boys, for menial duties.

Prayer.—Lo! the bell tolls for prayer. The *Brahmacharis* in yellow move in groups to the *yajnasbala*. Unmistakable friars, if friars had an order in yellow uniform! For half an hour their eyes are shut, as they sit meditating on *mantras*, known collectively as *sandhya*. This done, fire is blazed on an altar and fed with *ghee* and aromatic drugs. The chant of hymns, accompanying the ceremony—the pleasant chorus now rising, now falling—immerses the heart in an ocean of melody. This they call *deva-yajna*, performed, as they say, to purify the atmosphere. This, however, is not the sole advantage. The ceremony ends with a sermon of the *Acharya*,

whose shrill, yet calm voice, rings clear over the blazing flames, and supplies spiritual food for the day. Light material food—a little breakfast, then follows. Boiled rice, greased with *ghee*, is distributed, with which they fortify their stomach, and walk off to school.

School.—Morning school is from 7 to 9-30 a.m. The routine is similar to that of University schools, except that in the beginning of every lesson they chant the text:—

सहनौ यशः सहनौ ब्रह्मवर्चसम् ।

'May we the teacher and the taught earn together fame and divine knowledge.'

A conscious effort is thus made by the Guru and his pupils to share between them the blessings of education.

Dinner and Home-task.—Then comes dinner—the principal meal of the day. The teachers and the pupils assemble in the dining hall, and a few offer themselves to serve. The grace of the *Brahmacharis*, consisting of a verse of the Upanishad, has a grave meaning. They pray 'to eat together, to add to their strength together, to read for spiritual glory together, never to envy but to guard one another.' How strong this conscientiously oft-repeated resolve, makes their muscles and mind, and what noble ideals they garner away with food in their hearts is for the future to disclose. Says a Sanskrit aphorism:—Of food (अन्न) is mind (मन) made.

Evening programme.—After home-task, there is another light tit-bit; and then the school sits again up to 5 p.m.

Play follows half an hour's rest. The gong is struck. They stand in a row. The games-instructor calls the rolls. One sug-

gests, they may swim instead of playing. For foot-ball and hockey they always have wrestling and *kabaddi* too. Now is flood time, which will last for a few months. Let them go out, then. The Principal grants permission and they walk off. See them catering and jumping, as they move in glee to the *nālā*. Teachers who know swimming go with them. The boys of higher forms may dive and swim in deep water. For others there is the shallow aqueduct. They plunge; they swim, now with the stream, now against it. Look! they float on their backs, like dead bodies, as they say.

There are a few novices, desirous of learning how to swim. The *bhanda'rī* throws them over the bridge. Two stout swimmers stand in water to help them, as they pop their heads after the sudden dip, and begin to struggle to keep themselves from sinking. In most cases the boys help themselves. They strike the water with hands, as with a paddle, and swim clear to the bank. A brief and summary, yet a very successful method of teaching the swimming art!

It is evening. They have to pray, and must return in time lest the Principal withhold his permission next time. Brahmajūna, Devayajūna, Evening meal. A short walk and then sleep. This completes the programme, which extends to 9 p.m.

For a full day we have been amidst *Brahmacharis*, watching their movements, studying their manners and ways. We have seen them at play. We were with them in school-rooms. We had their company at dinner. They are built of the common stuff, no doubt, and have been picked out of ordinary town lanes. A city-school headmaster, however, thinks otherwise. 'What physical prodigies!' he exclaims,

'they are their own seniors by a year or two.' Did you talk with them? How up-to-date their information! They read papers, attend lectures, and study in their own language. Very often a quarrel breaks out. They beat one another, but no foul word is used. Report comes to the Principal, and each owns his own fault. The complainant is his own witness. If need be, his opponent will bear out his case. Punishment, they say, must be given and borne. Why, then, aggravate the sin by lying? They promise to reform, not to escape punishment, but as it is their duty.

The day is over, and we must to our rest.

A few days hence, the Gurukula will close for the summer vacation. For a month, the *Brahmacharis* will be on hills. Go, reader, with them, and see how hardly they brave up difficulties. Even Pathans, bred and brought up amidst stones, and marked for their instinct of fortitude and valour are struck with wonder to see these city lads walking over rough roads bare-footed and lightly clothed at a pace of thirty miles a day.

Now is the occasion when their inquisitive nature and resourceful brains find each an abundant field for the display of their marvellous activities. Each nook is groped; every recess peeped into. They dive into fastnesses, and climb perpendicular hills. A promiscuous collection of herbs, fruits and berries is laid by, and brought to the teacher, with conjectures at their nature and utility. Such occasional glances into naked nature form not only a pleasant relief from the monotony of academical life, they also afford opportunities for the cultivation of a spirit of original research, and the verification of truths and

formulae learnt in books. The lads return from the hills, richer in knowledge, stouter in physique, hotter in their pursuit of inner realities. They are proud no more. A glance at the infinite has brought home to them the insignificance of what human knowledge can reach. The temple of Truth cannot be measured in cubits and yards. The earnest votary stands at the door, his hands folded, his eyes open, his heart over-awed. He prays not to stride in the corridors of the temple, nor yet to go straight to the deity and worship. Blessed he, if after fervent hankerings and patient austerities, he be allowed to make an offering of his faithful devotion on the altar of selfless endeavour. If in the course of this offering, he gets a glimpse of the sacred light, he is doubly blessed.

CHAMUPATI.

UTILITY OF THE DIRECT METHOD IN TEACHING A FOREIGN LANGUAGE.

AN apology may be deemed necessary for opening up the discussion of the present subject. As however reasonable freedom of discussion is essential in the sacred cause of education, the writer would think it better to begin the consideration of the subject proper, without any preliminary remarks.

The essential feature of the direct method is to teach from actual objects—to teach by demonstration; and the real skill of the teacher adopting the method, consists in imparting information to students in a manner that it will not come upon them as a sudden heavy stroke. The method aims to lead the student to his own

Essential features of the direct method and its claims over any other method in the education of children.

judgment, by means of leading questions, based on what he already knows or is made to know. Thus the development of reasoning and memory, the two faculties

necessary for the acquisition of knowledge, by infusing and enlivening the potent faculty of observation, which in turn gives birth to the two faculties just referred to, is the real spirit of the method. These along with the necessary homely relations existing between the student and the teacher, as well as the moral force developing among the students, due to careful and systematic work, are some of the features, that establish the claims of the direct method over all others for the education of children.

While however the above remarks represent the essential spirit of the direct method, it must be clearly understood that, they are founded on two presupposed conditions, viz. (1) that the teaching is to be from actual concrete objects, as the child's mind is hardly capable of forming ideas about anything, unless it be presented before him, (2) that the child is led to his conclusions—a *pro.*

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gressive stage next to the one described above, as now it is possible to teach the child elementary truths from data already known, when properly led to use its reasoning power. These conditions, as forming the very soul of the direct method, limit its application to a great extent.

The study of a language, as being more or less a study of words and the way of using them, is a study, guided directly by the principle of practice. It is only because the mother-tongue, as a conventional mode of expressing the ideas is of frequent practice, and hence appealing to one's ears that, one is easily disposed to learn it. Objects and ideas do not differ materially in different parts of the world, but the conventional modes of expressing them are different. Although then it is true that, the fund of words and sentences grows up due to increased observation, causative of the corresponding ideas, it is obvious that practice alone determines the form, in

which the words and sentences, expressive of the ideas should become familiar to the student. As the form determined by the mother-tongue alone is the one of usual hearing, and the one forced by heredity that, the mother-tongue appeals most naturally. In fact what is teaching, but making the boy learn new and new ideas—better learnt when they are carefully graduated, the demonstrative portion being first impressed very firmly—through new and new expressions? That the abovementioned principle of practice is the one entering into the method of teaching, would be easily seen from the simple fact that, one remains totally ignorant of the words and expressions special to trade or business or anything with which one is not at all in touch. To express matters briefly, the principle of practice is one, that has much to do in education—nay it is often found that, it overrides the naturally more potent and important principle in the direct method, *viz.*, teaching from actual

objects, as the former is one, that strikes the superficial thinker, not caring to dive deep in, to consider how it is the growth of ideas, that leads to careful practice.

Thus it would be seen that, it is constant practice alone, which makes one familiar with the peculiarities of expression of the mother-tongue, and there too it is not very uncommon to find mistakes occurring in the early stages of childhood.

How practice forms the essential principle in the study of the mother-vernacular.

Thus then the study of grammar is not essential for the study of the mother-tongue, object-study or the study of the direct portion of observational sciences, forming the most suitable course of study for children. But with a foreign language the case is different; at least an elementary knowledge of grammar is quite essential for its study, as an attempt to force into the students' memory some common expressions is at once unnatural and as such very laborious and time-taking. Even the advocates of this sort of direct method do not deny that, the method is based on the principle, *viz.*, "Repetition is the mother of study." The direct method proposes to create an artificial atmosphere of circumstances, in which the boys' ears should get practised to the foreign language, actual objects and expressive gestures being used to convey the significant ideas to the boys, who evidently translate these gestures, &c., into corresponding vernacular in their own minds, as we are dealing with the case of boys brought up to speak the mother-vernacular, and not the exceptional case of boys brought up to speak a foreign language from childhood. Materially then, this process too is a process of teaching the foreign language through the medium of the vernacular, with the peculiar ways of expression of which alone the student is naturally acquainted. That words expressive of very common ideas and objects should first be taught, can at once be accepted; for these especi-

Method of translation as the essential means by which a foreign language is learnt.

ally the latter form the very things, with which one becomes familiar at first, even in the mother-tongue. The above considerations show the importance of translation in the study of a foreign language, in the very early stages of study. There hardly can exist any doubt that, in teaching a current language, the method of translation is not the only method, that ought to be adopted. None would deny the usefulness of the conversational method, paraphrasing and composition. As has been shown above however, the way how students learn a foreign language is

Conversational method, composition and paraphrasing as later developments when a sufficient knowledge of grammar is already acquired.

essentially the one of translation. It would not be possible to bring home the idea of a thing through foreign expressions to one, who is not already acquainted with the idea through one's vernacular. Before one can be able to converse or compose correctly in a foreign language, it is not enough to have a suitable fund of ideas alone, but there is in addition required a suitable knowledge of the modes of expression therein. This fact would require a foreign language to be learnt only when a sufficiently large fund of ideas, and so evidently of expressions in the mother-tongue, has become familiarized to the student, *i.e.*, when the faculty of reasoning has awakened in the student's mind. Here lies the secret as to why it is advanced students, that find it easy to learn a foreign language very easily.

As shown above, the syntax portion of grammar stands to be stepped over before a student can make any material progress in the study of the foreign language; and again as ideas can most naturally be conceived through the medium of the mother-tongue, the words as well as the grammar of the foreign language are to be so learnt at least in the early stages of studying the foreign tongue. To take the matters as they are situated, students desirous of studying a foreign language as considered capable of under-

Necessity of the study of grammar at least in the early stages of studying a foreign tongue.

standing grammar—a sufficiently abstract science—taught to them in the 3rd and 4th vernacular standards, hardly require demonstration, *i.e.*, they are too much advanced for the use of the first stage in the direct method. To make students learn some common constructions by heart, before making them capable of using these constructions, is a matter hardly desirable. It is inconceivable how the students should be capable to understand constructions easy or difficult in the foreign language, when they are to be kept in ignorance of the manner, as to how those constructions are to be managed—a matter which must of course be taught on comparative lines. These considerations would show that, if at all it is necessary to teach anything by careful graduation for the study of a foreign language, it is grammar. As has been pointed out conversation and composition ought to be made compulsory for proficiency in a current language. But as shown by these considerations, to insist upon these methods for being adopted from the very first,

making the study of grammar secondary, is at once unnatural, while teaching a foreign language. After a suitable knowledge of grammar, which should be carefully graduated, made as unburdensome as possible and taught on comparative lines through the medium of the corresponding vernacular, composition, conversation and paraphrasing should be given every importance due to them. When however the present direct system gives importance to readers more than to भाषांतरपाठमाला (the translation series) which have at least reckoned the significance of grammar for the study of a foreign language in the early stages of the study, that system not only deprives the more useful time required to be devoted to the study of comparative grammar, but has given scope to the most pernicious practice of learning the lessons with their meanings by rote—a practice which would hardly be considered as

desirable, and to prevent which possibly would be the aim of the direct method. These are some of the considerations, which make the present writer despondent of the direct system for teaching English—a foreign language—to Indian boys. In the face of these considerations at least based on the essential nature of the direct method, the present writer has reasons to believe that, doubts

as to the adaptability of the direct method in teaching English to Indian boys are sufficiently widespread—a fact confirmed by the writer's actual experience. May it be hoped then that, a careful and neat justification of that method be made, for the enlightenment of the ill-satisfied devotees of the sacred cause of education?

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SECONDARY SCHOOLS AND MOFUSSIL COMMITTEES.

WHEN we go to a wedding, sometimes it turns out to be the funeral and the wedding cakes serve the funeral repast. It is a common experience, at least with gardeners, that some exotic plants do not flourish at all and what applies to plant life applies with equal force to human experiences as well. The Educational Department has been with a vengeance insisting upon the formation of committees to guide the destinies of private educational institutions before they are admitted to Government aid. We fully recognise the broad principle underlying such an insistence, but how far the efficiency of administration will be maintained by them under circumstances as are at present governing mofussil life in India, can be better imagined than described. We may be permitted however to narrate the bitter experiences of some of them, if not all, which such administrative boards in the mofussil lead to. The elements that make up a committee there are of no ideal kind. Before proceeding to analyse the composition of it, one should not forget that in those places the urbanity of culture is very conspicuous by its absence and the products of education of the right sort, however much their academical degrees might be, are rare commodities. It is a great pity that there is neither the virtue of modern liberal education, nor the proverbial simplicity of ancient India in a degree essential to the independent growth of our national life. We find instead, lower passions play the suicidal part and at best, chill even the few individuals who in spite of perverse conditions will go on doing their level best to raise in the estimation of the world, the status of the place that gave them being. It is no wonder therefore that in areas where education has not sufficiently spread, and where people, however much in advance of their times, have limited means, not even enough to translate their ideals into hard realities,

wealth, wherever it may be, is apt to hold an undeservedly exaggerated position. Like charity which covereth a multitude of sins, wealth screens a host of imperfections and what is worse, entitles the possessor to virtues existing nowhere else but in the imagination. The ardent spirits who have ever their parochial interests to start with at heart have to make a virtue of necessity by coaxing the pursed nobodies to interest themselves in activities educational pertaining to their localities. In order to meet the financial exigencies which the policy of Government in regard to Secondary Schools under private management has created, there arises the necessity to approach men whose only title to a committee membership is, in more cases than one what they are materially worth and no more. It is positively dangerous at times to associate oneself with an organisation which sets all scruples at naught in their deliberations and aims at odious autocracy in all their acts under the pretence of serving the demos. We are sadly alive to a grave circumstance which gave open defiance to constitutional procedure and all moral laws. The repulsive Ego was a prominent feature of this secret conclave and adopted manoeuvres as treacherous as they were shameful. Honour and culture must give way to unscrupulous policy! The code of morals that sanctions vice under the dazzling influence of title, education and wealth, all in one, is certainly monstrous. It was an *ex parte* affair and the wronged person might have been given the chance of an explanation and perhaps to acquit himself honorably. If Cæsar's wife should be above suspicion, it is equally binding on Cæsar never to allow his rectitude to be judged *in camera*. The magnanimous course followed by the victim however dropped the curtain down so that the gross scandal and the authors of it were safe behind the screen and we have now not the intention to lift the veil off. "Et tu, Brute" was the dramatic reference of a broken heart addressed

to the President, evidently, drawn into the conspiracy, as the aggrieved person, practically, the soul of the institution, staggered out of the scene whither he had been drawn by mere accident or forced by intuition. Verily, the joy of revenge lasteth but a day while the glory of him who forgives endureth for ever. We know of a different class of counsellors on these administrative boards of mofussil schools, whose legal lore and worldly wisdom by their very subtlety and extent paralyse the proceedings of the governing body and render the progress of the institutions hopelessly halting and limping. They do not unfortunately see the wood for the trees, and their enthusiasm so vehement in the Council Chamber oozes out like Bob Acres' courage of their fingers' ends when the practical question of finance springs up like the classic sphinx demanding from them a right solution, to meet the urgent necessities of an elaborate expansion in the housing of boys or the proper equipment to the laboratory and the library or towards the improvement of the physical side of education in their schools. The plum is doubtless sweet, but the kicks are mightily hard. One may,

"As well go stand upon the beach,
And bid the main flood bate his usual height;
You may as well use question with the wolf,
Why he hath made the ewe bleat for the lamb;
You may as well forbid the mountain pines,
To wag their high tops, and to make no noise,
When they are fretted with the gusts of heaven;
You may as well do anything most hard"

as seek to—persuade common humanity to be good enough to taste the kicks itself and leave the plums instead for others' palate. As if there are not enough, there are again many self-appointed well-wishers even among the so-called educated men who make no scruples at trading upon the ignorance of the people in the matter of constitutional procedure and in their self-interest leave no stone unturned to get themselves recognised as the *via medium* between the Government and the public, let alone other advantages. It is

however the privilege of certain individuals to conceive lofty ideals, and give them definite shapes. The amount of enthusiasm, the exercise of great mental gifts, and a degree of self-sacrifice which are essential to the realisation of the ideals, can be successfully applied only by the authors of such grand ventures, and these persons by a stroke of irony are the very targets for pointed jealousies and petty prejudices conjured up against them by self-interested critics who must feel otherwise disappointed in their aims, if the influence of the organisers, is not at once weakened, never mind the means employed to put it down. The recollection of the fact as to how public men and great souls fared at the hands of those in whose very interests they were working, and on whom posterity, at least rightly showered posthumous honours, is but poor consolation indeed! With much regret and shame, it must be admitted that in our country public opinion, as such, does not exist free from influences, or if it does at all, it is either so conflicting or so callous that it is worse than dead. We can well understand the potency of collective opinion if it is not coloured by sectional or other narrow interest. But we cannot expect human nature to be other than what it is. There is therefore the dangerous risk of an institution being allowed to run off the lines best conceived or left to drift on under the advice of those whose purse weighs heavier than their qualities of head or heart or both. "Save us from our friends" is the only cry we can utter. But will that be a cry in the wilderness? Even settled facts have been unsettled to suit the exigencies.

K. R. GOPALA AIYAR.

THE MYSTERIES OF THE B. A. CLASSES.

"Moved by a spirit within to defend the cause of truth, I write."

I. Now that the various utterances of the day on the subject ought to have unmistakably shown the public that the problem of education is gaining vastly in importance, a word or two on behalf of the absolute necessity there is for reform in the educational system obtaining in our Presidency at present may not altogether be out of place in an "Educational Review." If it is argued that nothing in the way of a process of demonstration is at all needed to convince us that the general feeling of dissatisfaction and discontent with the existing educational methods and ideals is an expression of no mere passing mood—is due to none of that proverbial disregard of the immediate and the near, there is still the fact that it would be highly useful to know precisely what the matter is with things as they are. Let us consider one aspect of the question.

II. It is curious to note how speakers in general on the topic of educational reform have almost conspired to preserve a remarkable silence about the mysteries of the B. A. classes. The School Final System and the Intermediate Examinations have had more than their due share of notice. But not even the Cuddalore Educational Conference has thought it prudent to throw a word about the affairs concerning the higher classes of the Arts Course. It is not that the higher Arts education of our Province is at once exemplary and ideal. But it is that the authorities mainly responsible for our advanced University education—College Professors and Fellows of the Madras University—have an interest in artfully concealing the defects of a system for which their names must in a large measure account. It is that the public of this Presidency are under a mistaken notion that criticism of the higher culture of the land is not

within their sphere. Surely they have failed to note the truth of Bacon's famous dictum.

III. It is usually supposed that a great culture-value attaches to the Arts Degrees of the Madras University. Far be it from the ambition of a member of that University to try to break the charm of innocent belief in the comparative supremacy of a community to which he belongs. But it must still be remarked, in deference to truth which ought to be far more important than all the Universities in the world, that a kind of false ceremony has entered into the very spirit of the education that is given in the Colleges in our Presidency, and that that must largely take from both the spiritual and the culture value of our Arts Degrees.

IV. In fact, in that one word "ceremony" is the secret of all the drawbacks of the present-day educational system. In the first place, the pressure of studies in the B. A. classes is unbearably great. It seems as though they have been based on the supposition that for a space of twelve hours in the day, a B. A. student ought to have no other business than to read and write. Between the work expected to be turned out by him and the short duration of his course is a disproportion alarmingly striking. It is to be strictly understood that this statement is made not from the point of view of the results from year to year of the B. A. Examinations of our University, but purely from a standpoint of the intrinsic nature of the course. The merit of a course cannot properly be judged from the results of examinations. The good results during several years of the B. A. Examinations of our University have been mainly due to over-much of exertion on the part of the candidates in the matter of their studies. And this overwork has naturally set in an unhealthy development of mind which though it may save the situation of a hard University test, cannot yet be expected to help the cause of a successful solution of the problem of life. Again, the moral degeneration

which is the sure accompaniment of an overstrained condition of the nervous system is an evil which ought not to be lost sight of. And this evil, more than any other, explains the phenomenon of many a brilliant star of University fame losing its brightness all too soon.

* * * * *

V. As it is, it is the mere pretence of an acquaintance with English Literature which candidates for the B. A. Examination often have. Their knowledge is at best a third or a second derived function of an actual first-hand knowledge of the literary works themselves. It is the opinion which Mr. Saintsbury or Mr. Courthope or Mr. Bradley gives which usually finds its way into the answer-papers of students that sit for an examination which is to determine their fitness for a Degree. Sometimes it is not even this which would at least argue a study of good critical literature: short critical notes, given by their Professors barely for the purpose of meeting a University test, form the basis of their answers. Surely this state of affairs is not only unpleasant, it is conducive to the cramping of all original thinking. Slavery, in the world as we find it, is the worst lot to which humanity can be subjected—literary slavery more so than most others. But what should we think of a condition of helpless slavery eagerly sought for by a multitude of innocent students as the very height of happiness to which they can ever attain, and unblushingly sanctioned by a body of cultured people who may be expected to have known their responsibilities better? Webster's "Duchess of Malfi" is certainly a play full of a deep tragic pathos; but the tragic power of the play is a thing first to be felt. A careful study of the play will alone enable us to appreciate its merits which critics talk about. In other words, original study of literary works is to be the principal aim; and critical books are to serve the purpose of a useful supplement and guide to such study. But according to the present method of education

an undue importance is given to the reading of critical literature; and what cannot but be considered to be a sheer neglect of study of first-rate literary works is directly or indirectly or in both ways encouraged. As one of my friends said, our University wants us to have a hyper-critical sense: the result is we have a hyper-critical tendency. Sir Thomas Browne, Jeremy Taylor, Edward Gibbon, William Makepiece Thackeray, Thomas Carlyle are names which are invoked to give an appearance of solemnity and grandeur to the function of answering a B.A. English paper. The metaphysical imaginative-ness of Browne, the studied periods of Taylor, the majestic march of Gibbon's sentences, are talked and written about without their meaning anything more than a pitiful accumulation of mere words collected with the sole aim of earning that "two-lettered glory."

VI. The students are not much to be blamed: the field of studies to be covered is so vast that they cannot but be tempted to play false to their conscience. Then again it seems as though such falsehood were the very thing which the College Professors and the University authorities want. A question on the application of the metrical tests with regard to Shakespeare's plays to passages selected from that great poet is no uncommon one in a B.A. Shakespeare paper. To do anything like a small fraction of real justice to such a question, a careful and whole-hearted study of all the plays of Shakespeare is an indispensable desideratum. Do the authorities in power think that such study is possible in the space of two years? But questions are asked—and answers are written. The answers are often mere reproduction, sometimes even in point of language, of the criticism offered by others. It is no case of even a compliance with rule, it is a case of what is bound to be worse than the worst system of judicial criticism. It is a case of abject slavery to meaningless dogma. Such

ambitious questions as the above are the root-cause of the soul-less unskilled literary theft which seems to be the order of the day.

VII. Again what are we to think of the practice, obtaining on a large scale in most of the Colleges, of dictation on the part of the Professors of extensive critical notes? The practice is sometimes carried to such an extreme that those of the students as may have the independence not to take down the notes dictated are temporarily banished from the classes. It may be that the practice is simply out of a sympathetic desire of the teachers to meet in a way the persistent demand of students for "important things." But one ought not to approve of and support what one knows decidedly to be an evil. Teachers of English like my much-respected Professor Mr. K. B. Ramanathan who, despite the great amount of unpopularity they are on that account sure to get, have yet the moral courage to stand by their conscience in not stooping to the habit of dictating notes, are rare—very rare. "Save me from the praises of those that are unfit to judge."

The above are simply some defects among many that call for speedy reform. Reform is needed, if education is to have a soul. As to the precise kind of reform that would meet the present situation, I shall write in another article.

C. P. KRISHNAMURTHY.

SWAMI VIVEKANANDA—A SKETCH

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Price Annas Six. Postage, etc., extra.

Srinivasa Varadachari & Co., Triplicane, Madras

S.S.L.C. AND THE GOVERNMENT ELEMENTARY SCIENCE SYLLABUS.

I am very thankful to the Government or the S.S.L.C. Board for the common syllabus in Elementary Science; but I should like to say a few words about its working.

The syllabus for the IV Form is so vast that it will require at least four periods in the week to finish it. This is a thing impossible on the face of it considering the number of subjects to be taught in the class. It is indeed a laudable aim to give a comprehensive idea of the practical sciences in the IV Form to enable the boys to choose their subjects in the V Form. But what is the good of trying to put an impracticable thing into practice! Further I may say that nine out of ten of our boys are at a loss to select their optional subjects.

Again in the syllabus of the V Form there is nothing of Physics or Chemistry worth the name. So boys of the V Form have sufficient time to forget all that they learnt in Physics and Chemistry in the IV Form. I have no objection to having Physiology and Botany in the syllabus. What I want is that there should be a continuous chain of the subjects throughout the High School course: I may say a word here in passing. Almost all the boys of the IV Form show a desire to learn Elementary Science; but the same boys begin to neglect the subject when they step into the V Form, thinking that it is only a B Group subject and as such that they can afford to neglect it. This is the case with all boys irrespective of the subjects chosen. When we find Mathematics and Physics boys neglecting Chemistry, and Mathematics and Chemistry boys neglecting Physics, in Ele-

mentary Science, it is no wonder that non-Science boys neglect them altogether. We cannot find fault with the boys. The fault is in the system. When such is the case, to omit altogether Physics and Chemistry subjects learnt by the boys in the IV Form and to teach them Physiology in the V Form is only indirectly instructing the boys to neglect the subject all the more.

According to the syllabus the boys of the V Form who have to learn Physiology are compelled to forget it when they get into the VI Form. They have already forgotten whatever they learnt in Physics and Chemistry in the IV Form and now they begin to forget Physiology learnt in the V Form. They are again to study in the VI Form the forgotten subjects Physics and Chemistry. The boys are thus put to a great hardship which is better imagined than described. The boys are in the last School Final class; they have to appear for the examination and they are asked to study a subject which does not form a part of the public examination. Naturally they are inclined to pay least attention to the subject and so they do. Hence the lot of the teacher who handles Elementary Science of the VI Form is very pitiable. The same person who happens to teach the subject for all the High School classes will find that great attention is paid to the subject in the IV Form, that there is good deal of indifference in the V Form and that there is utter neglect in the VI Form. Further the teacher is asked to do in the VI Form, very important and interesting portions of Physics such as Light, Magnetism and Electricity and to give them a popular treatment, while the latter two are entirely omitted from the syllabus of even optional

Physics. But I am the last person to say that these ought not to be taught in the VI Form; only they ought not to fall on deaf ears.

One may be tempted to ask me what I have to suggest to remedy the defects. My suggestion is that the syllabus may include Physics, Chemistry and Natural Sciences but that it should be continuous in all the High School classes. To effect this the more difficult portions of Physics such as Sp. Heat, Centre of Gravity and also a portion of Chemistry and Plant and Animal Life of the IV Form may be reserved for the V Form in addition to a portion of Physiology. These may be continued in the VI Form so that there may be a connecting link from the IV Form to the VI Form in all the subjects. Whatever comes under the heading 'The Sky' in the syllabus of Physiography of the V Form, may be carried to that of the VI Form where 'Light' is done.

My own opinion is that there should be three periods in a week allotted for Elementary Science in each of the classes, one for Physics, one for Chemistry and another for Natural Sciences, so that the boys are in touch with all the subjects throughout the course. I have found this more useful and effective than doing only one subject during one course and another during the next and thus leaving the subjects to the mercy of the boys for a long time.

The idea of arranging for delivering a course of lectures on 'First Aid' and of making provision for the various alternative courses is very good; but I am afraid that not even 5 per cent. of the schools will put it into practice.

The heads of institutions should make it a point not to promote boys to the higher classes unless they get at least 30 % of the aggregate marks in the subject. They should also inform the boys of their intention to do so before-hand. Failing this, the Government or the S. S. L. C. Board should take up the responsibility on their shoulders and do the needful, if they really have the progress of the country at heart, by introducing a real and more useful course of instruction in Practical Sciences to all the boys of the High School classes to enable them to equip themselves very well for any course, technical or industrial, which they may choose in life.

In fine, I may conclude by saying that, unless and until the above suggestions are carried out and the boys are made to understand in some way or other, that Elementary Science is as important a subject as their A or C group subjects and that the neglect of the subject is tantamount to failure in the public examination, it will be only waste of time to have Elementary Science in the High School classes, and it will be by far better to throw it into the gulf of oblivion than to allow it to die a lingering death.

K. S. SUNDARARAJA IYENGAR.

EDUCATION.*

GENTLEMEN,

One of the recognised modes of beginning an essay of such a character is an exposition of the general conception. The word "education" is derived from the Latin *educere*, a meaning *out* and *ducere* meaning to *lead*; and signifies a "leading out" or "drawing forth" of the manifold qualities inherent in man. The Latin root recognises, by implication, that certain qualities lie dormant in man as seed-qualities. It is the object and purpose of education to nurture and develop these seed-qualities along lines indicated by Nature and Experience.

2. From the standpoint of the individual affected, the subject may fitly be divided into the well-known, and familiar heads of (a) Physical, (b) Intellectual, (c) Moral, and (d) Religious education. Such a division corresponds to the fourfold aspect of man as presented by his body, mind, moral sense, and soul.

3. The possibilities of physical culture are wide and varied. Every one knows what great physical development may be attained by a close pursuit of the Sandow's system. His grip dumbbells and developers are being used by men and women all over the world with marked and substantial benefit. Many a bent spine has been straightened up, and many a diseased man has had a new lease of life given to him. Weaklings had developed an extraordinary amount of strength, and people who would otherwise have been quite ordinary men, are now posing before the world as the exponents and professors of physical culture on the lines of the Sandow's system. All of us have also heard of Professor Ramamurthi, who is known as the Indian Sandow, and some amongst us have probably even had an

* A paper by Mr. V. C. Srinivasa Ayyar, B.A., Headmaster, St. Joseph's Secondary School, Anjengo, read at the inaugural meeting of the St. Joseph's Secondary School Teachers' Association.

opportunity of witnessing his shows and of being spectators of his marvellous exhibitions of gigantic and extraordinary feats of strength.

4. Professor Ramamurthi and Sandow typify the intense vitality and physical vigour that a man can attain by an organised system of physical education. Rope-dancers exhibit a special variety of skill. The nicety with which they balance on the rope, the delicateness with which they perform evolutions thereon, the accuracy with which they shoot off in somersaults to a ground ringed with sharp knives, these cannot but compel our attention and evoke our admiration. The deft manipulations of a mountebank who twirls an array of plates simultaneously on the points of delicate rods all held in one hand, the cool dexterity and careless ease with which he mounts a tall stilt or balances on the point of a pole are equalled only by the subtle intrepidity of the Circuswallah who hops from one flying horse to another and the swift-as-lightning gyrations of the performing cyclist.

5. These illustrations of physical culture and skill are not presented as examples to be followed by the average individual, but merely as instancing its possibilities. I may go even a step further and say that the above types of physical culture should be carefully eschewed and should not be accepted as modes productive of healthy or desirable development. Sandow's system deserves condemnation because the method of exercise it inculcates does not apparently engage the interest of the mind. It is now generally accepted everywhere that games cannot be said to fulfil their proper object if they fail to arouse self-effacing interest in the player. Again the artificial and baneful atmosphere of unnatural and misguided excitement always associated with circuses, shows, and places of public exhibitions is hardly calculated to secure that healthy development which is invariably associated with the tennis court or the football field.

6. What then is the object of physical education? Is it the attainment of enormous physical strength, so that a man may keep his neighbours in perpetual fright? Is it the acquisition of mountebank skill, deftness, or subtlety in respect of gyrations, manipulations, or evolutions? I venture to submit that it is none of these. The average man realises that mere brute strength is of no avail in these days of scientific progress and intellectual advancement, and that deftness of manipulation is a valuable asset only to the professional trickster. He knows that all that he wants is *mens sana in corpore sano* a sound mind in a sound body. He values physical education simply because it is of valuable help to him in the culture of his intellect, just as the latter is of value merely because it is indispensable for his moral and psychic advancement. It is therefore plain that games like football, cricket, tennis, badminton, golf, polo, and gymkhana, and exercises like skating, swimming, running, jumping, and skipping are to be preferred to dumb-bells and gymnastics. I am not however prepared to say that a few minutes' exercise with the dumb-bells or Indian clubs, or in the gymnasium, will not increase our zest in participating in the games above enumerated.

7. Gentlemen, physical education knows no restrictions of age or sex. In England and elsewhere in Europe we hear of teams composed of old men of 70 and children of 15. The Europeans, more than any other race, have fully recognised the advantages of physical exercise. The strongest point about an English public school or educational institution is the provision for games. Out-door games are insisted on and boys and girls take to them naturally. Boating, riding, steeple-chase, swimming, all find a place in the sporting curriculum and incalculable are the benefits that flow therefrom. The faces of the students glow with the ruddy hue of health and they learn valuable, practical lessons in dis-

cipline and organisation. It sounds incredible, but it is quite true, to say that many of the greatest English administrators and politicians laid the foundations of their greatness in the football fields of Eton and Harrow. The qualities of endurance, submission to authority, co-operation, self-sacrifice, and *esprit-de-corps* are called forth by participation in these games and their indelible stamp is left on the players, while at the same time they unconsciously acquire increased vitality and enhanced physical vigour. Due importance is apparently not attached to games in Indian schools. Every school should have its own athletic association. Proper provision should be made for playing a number of games, to wit, tennis, badminton, football, and cricket. Boating, swimming, and picnics with sports may also be introduced as providing a healthy variety. Teachers should participate freely in all games, and awaken, and sustain the interest of the students. A bond of sympathy will thereby be established between teachers and students. Increased insight is obtained into the pupils' disposition and character, and a friendly connection is established between the teachers and pupils, which cannot fail to exercise a beneficial influence on the whole institution.

8. Now we come to the second head, namely, intellectual education. Our minds are never idle. It is a law of nature that the human mind can never be at complete rest. It must be working in one direction or other. If therefore we do not lead it along directions tending to our advancement, it will not be long before it will lead us to where we least desire to be, "for Satan finds some mischief still for idle hands to do." By education is ordinarily meant intellectual education, a lay educational institution usually deeming it beyond its scope to impart instruction in morality and religion except accidentally or incidentally. Many schools in India are practically the propagandists of a godless education wherein undue prominence is given to the intellect. Modern

education is grossly material, and is therefore to a great extent misdirected. The notion of a Divine Providence pervading and controlling the Universe would go far towards mitigating the evils of a materialistic system of education and the protagonists of religious education need but point to the chaotic condition of modern Europe to provide a fatal and colossal illustration of the irresponsibility and selfishness that are inseparable from a system of culture dissociated from the steadying influence of a wholesome religion.

9. The mind has two marked aspects amongst others, namely, imagination and reason, both of which are equally important. Poetry, the fine arts, and belles-lettres are closely associated with the imagination, while logic and the sciences have their roots in reason. Life will be divested of the major portion of its beauty and enjoyment if it were to be wholly invested with the hard and matter-of-fact aspect of reason. Reason constitutes the indispensable skeleton or framework into which is fitted the flesh of imagination, which gives grace, symmetry, and charm to the figure. Imagination, however, should not be allowed to become very flighty, lest in soaring into the sublime heights of theorisation, idealisation, metaphysics, and transcendentalism, it should burn its wings and be dashed with precipitancy to the ground. True wisdom consists in a judicious commingling of the two, so that the drab colours of reason may be relieved and variegated by the rainbow colours of the imagination. Hope is the daughter of imagination, and when reason has fired its battery of unanswerable arguments and home-truths and has bidden us to surrender unconditionally to its inevitable decrees, Hope and her companions flash past, as if on aeroplanes along the sky, as the bright harbingers of impending relief.

10. Let us now examine the curriculum of studies of an Indian High School, for perference, a High School in the Madras Presidency. It

comprises (1) a foreign language, English, (2) a Vernacular, (3) Elementary Mathematics, (4) Science, (5) History and Geography and certain other subjects of secondary importance. In former days instruction from the I Form upwards used to be imparted chiefly in English. This naturally made things unnecessarily hard for the students. Now it is everywhere recognised that instruction, in order that it may be effective, must be imparted in the vernacular of the students. Something has been done in this direction by the rule recently introduced whereby the vernacular has been made the principal medium of instruction in all the classes up to the III Form. In my humble opinion this is not enough. The vernacular should be the principal language up to the VI Form and English should be studied only as a second language: instruction should be imparted chiefly in the vernacular. It is true that the want of appropriate text-books in the vernacular is a serious obstacle; but, when once the rule is introduced, text-books are certain to be forthcoming. It is unreasonable to expect a supply without a demand which alone, from an economic point of view, can automatically regulate the supply.

11. A highly-developed language is one of the characteristics of an enlightened society and the inverse proposition is also axiomatic. Hence the study of language is of supreme importance, so much so that it may be said that linguistic culture is co-extensive with an expansion of the ideas. It is desirable to study the pronunciation and meanings of words clearly, definitely, and accurately; for words constitute the groundwork on which the superstructure of language is built. The importance of word-study cannot be over-estimated. There is at present a deplorable lack of precision in utterance, in conversation, and even in writings which are the result of mature deliberation. Whether it is the English language or a vernacular, we should always make it a point to acquire a precise and thorough

knowledge of the words we come across in our studies. This entails constant recourse to dictionaries and other books of reference. This process is very tedious and requires unlimited patience and untiring application, but the result will amply compensate us for the labour involved. Language is the foundation of all mental development and the mastery of it a *sine qua non* to intellectual progress.

12. It has been already pointed out that the study of a language is co-extensive with the development of thought. This statement is true till a certain stage is reached, when a fair mastery of the language may be presumed to have been acquired. Persons who have attained this stage can have access to the vast stores of learning embodied in books, magazines, periodicals, reviews, etc. The student has a whole sea of books to choose from and it is in selection that a wise discretion and the force of a discerning mind should be brought to bear. The number of books is legion, but the time at man's disposal is strictly limited. Confining our attention to the English literature some of the books that will repay perusal and study are—

(a) The novels of Sir Walter Scott, Charles Dickens, W. M. Thackeray, Lord Lytton, and Jane Austen.

(b) The poems and dramas of Chaucer, Spenser, Shakespeare, Milton, Goldsmith, and Tennyson.

(c) The works of Addison, Swift, Hume, Burke, Bacon, Lamb, and Macaulay.

The mediæval chivalry of Scott, the inimitable humour of Dickens, the scholarliness of Thackeray, the imagination of Lytton, the love of domestic life portrayed by Jane Austen, these have a charm peculiar to themselves. How can one enjoy the broad humour of Chaucer, the stately allegory of Spenser, the universal stories, broad-based on the permanent passions and character of man, of Shakespeare, the grandeur and solemnity of

Milton, the simple beauty of Goldsmith, and the finish and polish of Tennyson—I say how can one enjoy all these, or the chasteness and elegance of Addison, the judicial narrative of Hume, the lustrous eloquence of Burke, the wisdom and triteness of Bacon, the learning of Lamb, and the accuracy and finish of Macaulay, without having overcome the initial obstacle of the language? Are not the rewards worthy of still greater efforts? The answer is emphatically in the affirmative. The study of the works of great authors inevitably brings us into close contact with their spirit and the association cannot but leave indelible impressions in our minds and make us better and purer. Devour then such books with avidity, never rest till you have mastered their contents and imbibed their spirit. It is however of great importance that our ideas should be clear, definite, accurate, and polished. We should so study as to be ourselves in a position to transmit what we have studied to others. Hazy or incomplete ideas place a man in a very undesirable position. On the one hand he thinks he knows much, and is therefore not easily convinced he is wrong. On the other hand he has not the power of convincing others that he is right, for he lacks that definiteness and clearness of vision that are the sure concomitants of mastery. A Sanskrit sloka aptly describes his position or rank amongst learned men

“अज्ञः सुखमाराध्यः सुखतरमाराध्यते विशेषज्ञः ।
ज्ञानलवदुर्विदग्धम् ब्रह्मापि नरम् नरञ्जयति ॥”

“An ignorant man can be easily pleased, a wise or learned man still more easily; but not even Brahma can please the man of incomplete knowledge.”

13. Lastly we come to moral and religious education. Morality and religion are correlated and interdependent; the one usually follows as a necessary consequence of the other. Some great men sever morality from religion and ascribe the origin of the former to what they call the

moral sense in man. Such people do not see the necessity for the recognition of the existence of the All-pervading Quintessence, the Soul of the Universe, and hence their treatment of morality as something distinct. The theory of a Moral Sense is bald and cannot be properly explained without referring it to a higher principle of which it is but a type. Some other people propound that Morality is broad-based on the wide recognition by the people, and appreciation by them, of the theory of Utility; that is to say that morality is observed by the people because they are convinced of its usefulness as a practical social convenience and arrangement. Surely this is going unnecessarily far when the true explanation is gaping before our intuitive vision! Morality is founded on Religion which inculcates the idea of a common paternity in God and of brotherhood in man. Mutual consideration and friendship and all the social qualities that morality implies follow as a natural sequence from the recognition of the principle of universal brotherhood. Hence also is derived self-abnegation, self-sacrifice, and the conception of duty as dissociated from social sanction or ulterior reward. Duty for duty's sake, i.e., God's sake, should be the watchword of the truly religious. Then failure becomes joy, and men are measured by their strength of endeavour in the path of duty and not by their actual success. To quote a piece of poetry—

Great is the facile conqueror;
Yet haply he who, wounded sore,
Breathless, unhorsed, all covered over

With blood and sweat,
Sinks foiled, but fighting even more,
Is greater yet.

14. Gentlemen, this furnishes the true angle of vision. The acme of education is attained when the Ego has been completely effaced and brought into line with the Egos around us, when selfishness has imperceptibly merged into altruism and love for our fellow-beings. None of us are perfect. Let us recognise this freely and seize every opportunity for improving ourselves and equipping ourselves more completely for the duties that are associated with our sphere of existence. Intellect is nothing without moral character and trust in God; it is like a ship without a rudder or a person without an aim in life. Teachers especially have an onerous task allotted to them. Hundreds of boys are entrusted to their care and they are responsible before man and God for their character and studies. Teachers should keep a sound mind in a sound body. They should build up their minds with matter which is wholesome, bracing, enduring, and renovating. They should read healthy books, cull the gems that lie hidden in the works of great men, and apply their knowledge to the solution of problems of every-day life. Their lives should be spent in unwearying application; they should become centres whence the strong pulsations of healthy and vigorous thought, and the cheering radiance of a hopeful serenity radiate towards their pupils and unconsciously help them on to evolve their better selves.

GRAPHICAL ALGEBRA—containing about 36 diagrams with problems, by T. V. SWAMINATHA IYER, B.A., L.T., Headmaster, Wesleyan Mission High School, Triplicane. **Rs. 4.**

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

COMPULSORY PRIMARY EDUCATION, BOMBAY.

Bill introduced in the Bombay Legislative Council in July 1917 by the Hon. Mr. V. J. Patel.

Whereas it is expedient to provide for the extension of Primary Education in Municipal districts in the Bombay Presidency other than the City of Bombay. It is hereby enacted as follows :—

SHORT TITLE, EXTENT AND CONSTRUCTION.

1. (1) This Act may be called the Bombay Primary Education (District Municipalities) Act, 1917

(2) It extends to the whole of the Bombay Presidency except the City of Bombay.

(3) It shall be construed as one with the Bombay District Municipal Act, 1901, hereinafter called "the Principal Act."

DEFINITIONS.

2. In this Act, unless there is anything repugnant in the subject or context—

(1) to "attend" a recognized primary school means to be present for instruction at such school for so many and on such days in the year and at such time or times on each day of attendance as may be prescribed by the Educational Department of the local Government ;

(2) "child" means a child whose age is not less than six and not more than ten years ;

(3) "parent" includes a guardian and any person who is liable to support or has the actual custody of a child ;

(4) "primary education" means such instruction in reading, writing and arithmetic and other subjects (if any) as may be prescribed from time to time for primary schools by the Educational Department of the local Government ;

(5) "recognized primary school" means a school (or a department of a school) appropriated to primary education and for the time being recognized by the Educational Department of the local Government as being maintained in accord-

ance with the requirements of the said department ;

(6) "school committee" means a committee appointed under section 28 of the Principal Act.

ISSUE OF NOTIFICATION MAKING PRIMARY EDUCATION COMPULSORY.

3. (1) The Municipality in the Municipal District constituted under the Principal Act may with the previous sanction of the local Government declare by notification that primary education shall be compulsory in such district.

(2) Such notification may be expressed to apply to the primary education either of boys or of children of both sexes and the provisions of this Act shall apply accordingly : provided that where a notification has been issued by a Municipality with reference to the primary education of boys, such Municipality may in accordance with the procedure and subject to the conditions hereinafter enacted, issue a subsequent notification with reference to the primary education of girls.

(3) A notification under this section shall be published in the Bombay Government Gazette and shall be posted at the Municipal office and at such other places, if any, as the Municipality shall deem necessary.

MUNICIPALITY TO MAKE PROVISION FOR PRIMARY EDUCATION BEFORE ISSUE OF NOTIFICATION.

4. A notification shall not be issued under section 3 unless the Municipality has made, in schools maintained by the Municipality, such provision as the Educational Department of the local Government considers necessary and sufficient for the primary education of all boys in the Municipal district for whom such education would be compulsory on the issue of such notification, and for whom it would be necessary to provide accommodation in Municipal Schools.

RESOLUTION TO BE PASSED BEFORE ISSUE OF NOTIFICATION.

5. A notification shall not be issued under section 3 unless the Municipality has so determined by resolution passed at a general meeting specially called in this behalf, and unless such

resolution has been supported by at least two-thirds of the councillors present at the meeting.

APPLICATION FOR SANCTION TO ISSUE NOTIFICATION.

6. Application for sanction to issue a notification under section 3 shall be made in such manner as may be prescribed by rules made under this Act by the local Government, and such certificate or particulars as may be prescribed by such rules, showing that the requirements of sections 4 and 5 have been complied with, shall be furnished with the application.

SCHOOL COMMITTEE TO BE APPOINTED.

7. Where a notification has been issued in any Municipal district under section 3, the Municipality shall, if a School Committee has not already been appointed, appoint such Committee, and it shall be the duty of such Committee, subject to the provisions of this Act and the Principal Act, to enforce the provisions of this Act respecting the attendance of children at school and the employment of children.

DUTY OF PARENTS TO CAUSE CHILDREN TO ATTEND SCHOOL.

8. Where a notification under section 3 is in force in any Municipal district, the parent of every child to which such notification applies shall, in the absence of a reasonable excuse as hereinafter provided, and if such parent and child ordinarily reside in such Municipal district, cause such child to attend a recognized primary school in such district. *Of. 39 and 40, Vict. c. 79, s. 4.*

MEANING OF REASONABLE EXCUSE.

9. A parent shall be deemed to have a reasonable excuse for failure to cause a child to attend a recognized primary school in any of the following cases :—

- (a) where the child is prevented from attending school by sickness or other necessary cause ;
- (b) where the child is receiving instruction otherwise than in a recognized primary school or has already completed his primary education.

ISSUE OF ATTENDANCE ORDER BY MAGISTRATE.

10. (1) Where the School Committee is satisfied that the parent of any child who is bound

under the provisions of section 8 to cause such child to attend a recognized primary school, has failed to do so, the School Committee, after due warning to such parent, may apply to a Magistrate, and the Magistrate shall fix a day for the hearing of the application and cause notice thereof to be given to the parent.

(2) On the day fixed for the hearing of the application or on any subsequent day to which it may be adjourned, and after hearing the parent or his pleader, if either is present, the magistrate, if satisfied of the truth of the facts alleged in the application, may pass an order directing the parent to cause such child to attend a recognized primary school from a date which shall be specified in the order. *Of. 39 and 40 Vict. c. 79, s. 11.*

PENALTY FOR FAILURE TO OBEY ATTENDANCE ORDER.

11. (1) Any parent against whom an order with reference to a child has been passed by a Magistrate under section 10 and who does not cause such child to attend a recognized primary school from the date specified in such order, shall, on conviction before a Magistrate, be liable to a fine not exceeding three rupees.

(2) No Court shall take cognizance of an offence under this section except on the complaint of the School Committee. *Of. 39 and 40 Vict. c. 79, s. 12.*

PENALTY FOR EMPLOYING CHILD IN CONTRAVENTION OF ACT.

12. (1) Whoever intentionally employs, either on his own behalf or on behalf of any other person, any child to which the provisions of section 8 apply, shall, on conviction before a Magistrate, be liable to a fine not exceeding twenty-five rupees.

(2) No Court shall take cognizance of an offence under this section except on the complaint of the School Committee, and before making any complaint under this section against any person, the School Committee shall, unless such person has previously been convicted under this section in respect of the same child, cause a warning to be given to such person. *Of. 39 and 40 Vict. c. 79, ss. 5 and 6.*

SCHOOL COMMITTEE MAY AUTHORIZE A MEMBER TO APPEAR.

13. An application to a Magistrate under section 10 and a complaint to a Magistrate under section 11 or section 12 may be made on behalf of the School Committee by a member of such Committee authorized by such Committee in this behalf.

EDUCATION CESS.

14. (1) Where a notification under section 3 is in force in any Municipal district, the Municipality may impose a tax, hereinafter called an "education cess."

(2) The Municipality may select, as an education cess, any tax which may be imposed under section 59 of the Principal Act.

(3) An education cess shall not be imposed unless the resolution of the general meeting, at which in accordance with section 60 of the Principal Act the Municipality determines to impose such cess, is supported by at least two-thirds of the councillors present at the meeting.

(4) The proceeds of the education cess shall be devoted by the Municipality solely to the purposes of primary education.

(5) Subject to the provisions of this section the education cess shall be imposed and levied in the manner prescribed in the Principal Act for the imposition and levy of taxes.

REMISSION OF FEES.

15. Where a notification under section 3 is in force in any Municipal district, if the parent of any child who is bound under the provisions of this Act to cause such child to attend a recognized primary school shall declare in writing to the headmaster of any primary school maintained by the Municipality in such district that he is unable to pay the fees ordinarily charged in such school, such child shall be admitted to such school free of charge during the period for which such parent is bound under the provisions of this Act to cause such child to attend a recognized primary school.

SCHOOLS TO BE OPEN TO INSPECTION.

16. All primary schools maintained by the

Municipality in any Municipal district in which a notification under section 3 is in force shall be open to inspection by the Education Department of the local Government and the Municipality shall maintain such staff, buildings and appliances for all such schools as the said department may from time to time require.

WITHDRAWAL OF NOTIFICATION ON DEFAULT.

17. Where the local Government is of opinion that any Municipality has made default in any of the requirements of this Act, the local Government may by notification in the Bombay Government Gazette cancel any notification which has been issued under section 3.

SAVING.

18. Nothing contained in this Act shall be deemed to affect the public revenues of the Bombay Presidency or to impose any charge on such revenues.

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STATEMENT OF OBJECTS AND REASONS.

The object of the Bill is to enable Municipalities to make elementary education within their areas compulsory. The provisions of the Bill being permissive do not make it obligatory on any Municipality to introduce the principle of compulsion in the system of elementary education under its control.

The example of advanced and civilised countries in the world clearly shows that in order to make any substantial progress, in the diffusion of knowledge among the masses, it is necessary to resort to the principle of compulsion. The Elementary Education Bill of the late Mr. Gokhale was circulated throughout the country for official and non-official opinions. The opinions so received have since been published and their perusal leaves no room for doubt that the Bill met with enthusiastic support from all classes of people in the country. In the course of the discussion on that Bill in the Imperial Legislative Council the Hon'ble Sir Harcourt Butler suggested the desirability of amending by local legislation local laws so as to enable local bodies to introduce the

principle of compulsion and there seems no valid objection to such a course being adopted.

In the case of several Municipalities in the Presidency the number of boys in elementary schools is little more than half of the total number of boys of school-going age. It is absolutely necessary that such Municipalities, if

they are willing to introduce the principle of compulsion, should be empowered to do so by an appropriate enactment. The Bill contains necessary safeguards to ensure that Municipalities do not abuse their powers by any hasty or ill-considered action on their part.

V. J. PATEL.

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The EDUCATIONAL REVIEW, April 1917.

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THE FUTURE OF THE CLASSICS.

DEPUTATION TO THE RT. HON. MR. FISHER.

A deputation of the Classical Association waited upon the Rt. Hon. Mr. Fisher, President, Board of Education, last mail week to lay before him certain proposals with regard to the provision of teaching of Greek and Latin in Secondary Schools. The proposals are as follows:—

1. That the Board of Education be asked to use its influences and resources towards securing—

(a) That in each area of accessibility for school attendance there should be at least one secondary school for boys and one for girls, at which efficient teaching may be provided in both Greek and Latin to a standard enabling pupils of ability to enter a specialized classical course of a high standard in some British University. In order to do so they must under present conditions be fitted to compete with reasonable chance of success for entrance scholarships at the different Universities.

(b) That in every area a system should be arranged by which pupils who so desire can be transferred to such schools in the area; and that in the case of the holders of scholarships an additional allowance should be made to cover any increase in the cost of daily attendance where travelling is involved. If more than one local authority is concerned in such an area, a combined scheme should be organized for transferring the tenure of scholarships for this purpose.

(c) That, besides the school or schools in which Greek is taught the number of secondary schools maintained or aided by the local education authority, which provide teaching in more than one language other than English, should be steadily increased, and if the first language is a modern language the second language should always be Latin, unless for special reasons Greek were preferred in some particular cases.

(d) In the case of pupils who do not pass directly from an elementary into the classical secondary school, facilities by means of scholarships for transfer into the classical school from other secondary schools should be provided. The successful working of any such scheme depends upon the general facilities existing in the area (i) for the transfer of all able pupils from primary to secondary schools at an age early enough to enable them to profit duly by a secondary course, and (ii) for their remaining at school long enough to complete it.

2. That the Board be asked to regard a training in Latin language and literature, and at least some knowledge in the original of the typical parts of Greek literature, as an important and generally necessary element in the training of all teachers of English literature above the elementary stage; and to use its influence to encourage the application of this principle in secondary schools.

3. Finally the Classical Association desires to draw the attention of the Board of Education to the existing tendency, by which the education given to the cleverer children who come from the elementary schools bears a different stamp from that given to children of the professional classes, being directed more narrowly to material and industrial well being and less to the effective study of literature and history. Among the pupils from the elementary schools will be many who are likely to exercise influence in the public life, both municipal and national, the coming generation and in the interest of the whole community it is of high importance that these future leaders of their fellow citizens should have some knowledge of the past history of mankind, especially of its political institutions and experiments; and should acquire an enduring interest in the ideals of both private and public character, by which the noblest sides of civilization have been moulded. The Classical Association observes with interest the declaration of the Workers' Educational Association (Education Reconstruction, Recommendation 12): "That since the character of British democracy ultimately depends on the collective wisdom of its adult members, no system of education can be complete that does not promote serious thought and discussion on the fundamental interests and problems of life and society." The Classical Association believes that this end can be secured only if the same freedom of access to the thought and history of the greatest races of the past as is given to the children of the more privileged classes is also, by a wise system of national education, opened to children from every class of the community.

Lord Bryce, in introducing the deputation, said that there were some studies which do not present sufficient prospect of a definite pecuniary advantage to induce the average parent to desire that his children should be educated in them. They are nevertheless so essential to the highest conception of education and to the higher intellectual and moral

life of the nation, that it is of great importance that they should be retained and due provision made for them. The classics are such subjects, and, while it is impossible to provide instruction in them in all secondary schools, some way must be found to discover the promising boys and girls who are likely to benefit by them, and to provide them with adequate teaching. The problem was one largely of organization: but it was of great importance that the classics should not be the prerogative of the richer classes, but that the children of the poorer classes should have the same chance of obtaining all that education can give.

Sir Frederic Kenyon, in laying before the President the proposals of the Association, stated that they were not a selfish effort on the part of the advocates of Greek and Latin. They were part of a larger scheme of educational reform in which the Classical Association were co-operating with other bodies representing not only other branches of the humanities, but also natural science. The Association were not asking for a privileged position on behalf of the classics. They recognized fully that in the older public schools, where classics had such a position, increased provision must be made for natural science and the modern humanities at the expense of classics. But, on the other hand, they asked that in schools in which provision for classical teaching did not exist or was inadequate such provision should be made. Aptitude for classical study was not confined to one social class, but could be found in all classes. They did not ask that classics should be compulsory on any one, but that ignorance of the classics should not be compulsory. Those who were fitted to benefit from Greek and Latin in the original tongues should be enabled to do so. This policy had the assent of the Workers' Educational Association, and it was expressly affirmed at a recent Conference of the Council for Humanistic Studies and the Joint Board of Scientific Societies. There was now a unique opportunity for making reforms in secondary education with practically unanimous acceptance.

Mr. W. Edwards, Headmaster of Bradford Grammar School, argued that boys of the poorer classes have a capacity for classics equal to that of any other type of boy. In his own school the number of scholarships at Oxford and Cambridge won in classics during the last ten years was greater than in any other subject (33 out of 102.) The aptitude was therefore proved, but the facilities

were very deficient. In Bradford there was a classical school within the area of accessibility; but over the border no boy had a chance of a classical education unless he could pay full fees and expenses. Even where schools existed, the provision of scholarships was often quite inadequate. What was desired was that in every area of accessibility there should be at least one school giving adequate instruction in Greek and Latin, and that scholarships to these schools should be provided out of public funds, so that the opportunity of a classical education might be within the reach of every boy, rich or poor.

Mr. A. Mansbridge spoke of the interest of the working classes in classical education. There were to-day many working people who associated the name of Greece with the cause of humanism, and who eagerly seized every opportunity of extending their acquaintance with classical civilizations. This would in time produce a widespread demand for the study of the classical languages. Hitherto the opportunities for such study had been confined almost entirely to the children of well-to-do parents; but this was an injustice which the working classes would not tolerate in the future. The opportunities should be open to those whose minds were potentially full of passionate interest, and who would utilize them for the development of joyous and powerful scholarship. Working men and women are already to be found who study Latin and Greek for the sake of the sheer joy which they get from reading the masterpieces in the original. There was a great deal of study of the Greek Testament amongst working men and women. He hoped the day would come when a working man might be able to enjoy Homer in the original, and excite no more comment than his enjoyment of Shakespeare does now. Further, Latin and Greek were the means of entry to many occupations, including the Church; and this justified his contention that these languages should be accessible in every local area to all classes.

Miss Limebeer spoke of classical education in girls' schools. Two professions would far outweigh all others for women after the war—teaching and secretarial work; and both of these demanded that clearness of thought and experience which we expect from the study of the classics. Latin at least should be available for all girls; and Latin teaching suffers if the teachers do not know Greek. The solution was to be found in allowing certain schools to be weak in some subjects and strong in others,

Professor R. S. Conway desired to call attention to two points—first, that the Board could count upon the cordial co-operation of the local education authorities; and secondly, that at present there was great danger of boys and girls being forced by the accident of extraneous encouragement into subjects for which they had no particular taste. Classical studies are the romance of the poor; but at present the access to that romance is obtained at too heavy a cost.

THE RT. HON. MR. FISHER'S REPLY.

The President, in reply, said:—You have come here on behalf of the Council of the Classical Association to represent to me the just place of the study of classical antiquity in our scheme of national education. You do not claim any special privilege for classical studies. You expressly realize the importance of an education in science and in the modern humanities, and you realize also that in the past the classical studies have enjoyed a position of prerogative which you no longer desire to defend. Your point, as I understand it, is this that in our ancient public school classical studies are forced upon many boys who are quite unfit to profit by them, but that on the other hand, in the municipal and county schools the facilities for becoming acquainted with the literature, the language, and the history of Greece and Rome are at present deplorably insufficient; and you desire the Board to use its influence in the direction of making such provision for the teaching of Latin and Greek in every local area as will place those studies everywhere within reach of pupils from all classes of the nation. Now I am cordially in agreement with the members of this deputation as to everything which has been said with respect to the great value of the classical studies as an instrument of humane education. A study of classical antiquity not only introduces us, to some of the most beautiful literature in the world, but it has been a very living and progressive branch of intellectual study in the past generation. I remember very well that when I took my degree I came to the deliberate conclusion that there was no further room for fruitful research in Greek history, and in token of that precipitate and erroneous opinion I parted with my copy of "Muller's Fragments of Greek Historians" to my friend Professor Gilbert Murray. Immediately afterwards Sir Frederic Kenyon discovered among the papyri of the British Museum Aristotle's longlost "Constitution of Athens" and from that moment onwards there has been a succession of discoveries in the field of Greek antiquity more

thrilling and fruitful than any which the world has known since the days of Aldus and Poggio. I feel myself, and I know that it is the feeling of the Board, that the complete disappearance of Greek education from this country would be a great and irredeemable loss, and that the study of classical antiquity stands on an entirely different footing from any highly specialized pursuit such as Hebrew, let us say, or Armenian.

I have already outlined to the House of Commons a scheme for the development of our secondary schools, and I think that the new regulations, coupled with the new grant which it is proposed to attach to advanced course in those secondary schools, will go some way to meet the desires expressed by this deputation. We propose to encourage advanced courses in all the main subjects of secondary education—in science, in mathematics, in the modern humanities, and in classics—and we hope that the schools offering these advanced courses will be so co-ordinate that every great subject of secondary education may be acceptable to every student in a given area of accessibility. We also contemplate a system of transfers. Of course the deputation will realize that a system of transfers is a somewhat difficult matter to arrange. There will be a great number of practical obstacles to overcome before such a system can be brought into smooth and continuous operation. My feeling is that the plan can only really succeed when the secondary schools in any given area of accessibility shall have established special reputations for themselves in special branches of study; and of course a system of transfers, to be successful, would have to be accompanied by a system of scholarships and maintenance allowances.

I ought perhaps here to interpolate a warning. The Board is not in a position to impose curricula upon schools. We can, of course, through our system of grants bring influence to bear upon schools but as George Washington said, influence is not government; and although it is the policy of the Board to secure the development in every area of advanced courses in all the main branches of secondary school study we shall have to depend upon the co-operation of the governing bodies of the schools and of the local education authorities if full effect is to be given to our desires. I notice the deputation laid stress upon the transfer of all able pupils from primary to secondary schools at an age early enough to enable them to profit duly by a secondary course, and on their remaining at school long enough to

complete it. Well, the policy of the Board has for long been directed towards these two objects. The Board has tried to induce children to leave the elementary school for the secondary school at a sufficiently early age, and has attempted to stimulate the length of school life. We have perhaps been more successful in securing the first object than the second, but progress has been made in both directions, and the deputation may be assured that neither of these two important objects will escape our consideration. You are also concerned to point out how important it is that a knowledge of classical literature should be possessed by the teachers of English in our schools. No doubt it is ideally desirable that a teacher of English literature in its higher forms should be acquainted with the masterpieces of the Greek and Latin genius; but the Board, as I think the deputation will realize, could not insist upon a knowledge of Greek and Latin literature from every teacher of English literature in our schools.

One final observation. I notice that the Classical Association speaks of the municipal and county schools as being directed more narrowly to material and industrial well-being, and less to the effective study of literature and history. I think that the Board would not accept such a statement without some qualification. It is true, of course, that the provision for the humane studies has not hitherto been so effective in some of these newer schools as it has been made by long and established tradition in many of the older schools; still, there is a steady progress towards a better general education in the county schools and in the municipal schools; the level is being steadily raised, and I hope very much that one of the results of the new grants to secondary education will be to enable us to raise it still further. After all, success in secondary school education depends upon the quality of the teacher, and the quality of teacher has some relation to the scale of his remuneration.

Lord Bryce, in thanking the President for his sympathetic reception of the deputation, expressed the fullest concurrence with his observations with regard to the teachers.—*The Hindu*.

INDIAN STUDENTS' ADVISORY COMMITTEES.

Conference of Provincial Secretaries.

SPEECH BY SIR SANKARAN NAIR.

SIMLA, July 6.

The Conference of the Secretaries of the Provincial Advisory Committees for Indian students going to England commenced its sittings this morning. In addition to the Secretaries there were present Sir Edward Maclagan and Messrs. H. Sharp, G. Anderson, F. N. Cheshire and Ritchie.

Sir Sankaran Nair, who presided, in opening the assembly said: I have much pleasure in welcoming you to this Conference. This is the first occasion on which the Secretaries of the Provincial Advisory Committees for students proceeding to England have met in conference. I am sure you will agree with me that a meeting such as the present can be productive of nothing but good. It is not merely that you are able to advise as to the improvements which we may suggest to your respective Governments but also that you have opportunities here for discussing informally a number of details of your work both among yourselves and with our officers. I appreciate very much the help which gentlemen who work like you at a distance from each other and are occupied like you in duties of a somewhat isolated and distinctive character must obtain from mutual consultation, and I trust that this meeting may bring about a number of real improvements in the important duties which you undertake on behalf of Indian students who proceed or wish to proceed to other countries. As you know the work undertaken on behalf of such students is divided into two main branches, work in England and work in India, and though these two are dependent on each other they are under distinct organizations. These organizations have now been in existence for about 8 years. Before the year 1909 the Indian student proceeding to England had no recognized agency to which he could apply either in this country or in England for advice or help in the numerous difficulties which confronted him and in the absence of authoritative information regarding students' educational institutions in England were averse to granting many of the facilities which have subsequently been obtained. In 1909 an Advisory Committee was, at Lord Morley's instigation, appointed in London

together with a bureau of information to supply advice and help that had hitherto been lacking. The functions of the bureau have been to answer enquiries in regard to educational facilities, to keep lists of suitable places of residence, to furnish students with references, to bring to the notice of the Advisory Committee any cases in which the regulations of educational institutions bears hardly on Indian students and generally to give all possible assistance either to the students themselves or to their parents in India. There have been some intermediate changes in the status and *personnel* of the bureau, but its functions have remained substantially unaltered, and I have little doubt that it has been an agency of great value to the Indian students in England. We have no doubt heard complaints regarding it. Such complaints were investigated not long ago by a Sub-Committee of the Advisory Committee and the Secretary of State, as you know, passed orders dealing with the various grievances put forward. We still occasionally hear complaints, but although the organization doubtless has points on which improvements may be possible, there is no one in India in a better position than you are to appreciate the fact that the home organization is serving a most useful purpose. The existing arrangements are necessarily official, not in the sense that they imply any form of compulsion on students to come within their scope, but in the sense that they rest on an official basis. Every effort has, however, been made to utilize private agencies, and, as you know, a great step was made in this direction last year when the Universities of Oxford and Cambridge started their own organizations for Indian students, a constitutional change for which we are much indebted to the Vice-Chancellors of those Universities.

I have mentioned all this because your work in India is necessarily connected with the organization in England but in your Conference here it will be no part of your functions to discuss, except perhaps indirectly, the arrangements made by the Secretary of State for assisting Indian students in England. Your duties are different to those of the London bureau, but they are, to my mind, in many ways just as important. Concurrently with the establishment of the London Committee and bureau Provincial Committees were established in India whose functions were to be firstly to furnish information and advice to Indians who contemplate going to England, secondly, to circularise in India to colleges and

other institutions, educational, financial and social information collected by the London bureau and thirdly, to communicate with the bureau on behalf of students before they start or on behalf of their parents when they are in England. It is on you, gentlemen, as Secretaries to these Committees, that the brunt of this work must fall, and we look to you to advise as to the possibilities of improvement in our present arrangements. We do not call for uniformity in the systems adopted in various provinces, but we feel that in some matters one province has been more successful than another and we wish each to profit by the experience of the rest. We feel, too, that in some provinces the present organization has been wanting in life and we wish to make it in all areas a real and moving force. We shall ask you to consider the best method of constituting the Committees and the best arrangement for your own work in this country, shall consult you regarding your relations with the bureau and the class of information you should be prepared to supply to the bureau and to students themselves, shall further ascertain from you your views on the issue of information by means of publications and shall lay before you certain other matters for your consideration. Your task is an extraordinarily difficult one. You have to acquaint yourselves with a number of complicated regulations issued by a number of different institutions and to keep yourselves abreast with every change made in those regulations. You have by means of the maintenance of careful memoranda, to bear in mind the circumstances of a large number of students and by methodical correspondence to forward their interests to the best of your power. You must be constantly accessible for consultation and you should be quite ready to listen with patience to the many schemes put forward by students or their parents. You must be able to put yourselves in their place and be ready to give clear advice both as to what they should do and also what is even more important, as to what they should avoid doing. You have to know about the prospects not only in England but in other foreign countries also as well as in India itself. You are expected to have accurate information about banks, rates of exchange, travelling agencies, steamship companies, cost of living in town and country, respective merits of different educational institutions, health conditions of different towns, rates of remuneration in different professions and a number of other items upon which

ordinary man is usually uninformed and of which a prospective student or his parent is often absolutely ignorant. You have in your hands the making or marring of many careers, and although I know that you fully appreciate your responsibility in this respect I trust that you will excuse me if I once more bring it to your notice. It will, I am sure, be with a full sense of this responsibility that you will enter upon the business of the Conference which we are opening to-day.—*The Leader*.

ORIENTAL RESEARCH—NEW INSTITUTE INAUGURATED.

TRIBUTE TO SIR R. BHANDARKAR.

In the presence of a large and representative gathering on the evening of Friday, July 6, His Excellency the Governor performed the ceremony of inaugurating the Bhandarkar Oriental Research Institute, Poona. The site of the Institute is at a convenient distance from the city and in the vicinity of the Fergusson College. It covers an area of thirty acres, fifteen of which are to be utilised in connection with the Institute itself and the remaining fifteen for establishing a colony of research workers. As a first step towards carrying out the scheme the promoters have started to build a home for the Institute. When completed it will cost about Rs. 70,000. At present only the central hall has been taken up and is nearing completion. Its cost is estimated at Rs. 30,000. It is considered that this hall will suffice for the needs of the Institute during the first few years and will accommodate the libraries, including the Government collections on manuscripts. It will also be used as a reading-room and a lecture-hall.

A *shamianah* was erected near the Institute for the ceremony. On arrival Lord and Lady Willingdon were received by the Chief of Ichalkaranji, one of the Trustees of the Institute, and by the members of the Working Committee, and conducted to their seats on the *dais*. Sir Ramkrishna Bhandarkar, whom the assembly honoured by rising when he entered the *shamianah*, occupied a chair to the right of His Excellency.

Dr. P. D. Gane, one of the Secretaries of the Working Committee read the Committee's Report for the years 1915—17. In this they stated:—The history of the present project goes back to a little more than two years. There was at that time an earnest and widespread—though to a certain extent indefinite and unshaped—desire to commemorate in some worthy manner the magnificent and life-long services of Sir Ramkrishna Gopal Bhandarkar in placing Sanskrit studies in India on the most approved and scientific basis of western critical scholarship. Sir R. G. Bhandarkar was the first among the Indians who made their mark in the world of oriental scholarship, by bringing to bear upon Sanskrit learning the critical method of study adopted by European ideologists. The firm and successful attitude he took in his famous controversy with Weber over the dates of Panini and Patañjali, and his contributions to the deliberations of the International Congresses of Orientalists, easily established his reputation as the first Indian who gave the required critical turn to Indian scholarship. Secondly, there was the known circumstance that the project which the Imperial Government were for some time seriously entertaining about the establishment of a Sanskrit College, with a school for oriental studies attached to it, was indefinitely laid aside owing to the financial stringency caused by the war. As a result of all this, it was thought that the best form which a memorial to Dr. Bhandarkar's work should take was an Institute, bearing his revered name, and affording facilities for advanced work in oriental subjects, placing at the same time the old shastric learning on a sound and modern basis. Such a scheme was also very likely to meet the approval of Government, as their own plans in this direction, including that regarding the disposal of their valuable collections of manuscripts at the Deccan College, were now held in abeyance.

A meeting of all the Sanskritists of Poona and of other persons interested in the cause of oriental studies was, therefore, convened at the Anandashram on the 6th of July 1915. This meeting was also attended by some Professors of Sanskrit from other parts of India. The utility of an institution like the one proposed was thoroughly discussed at

thanks is also due to all those who have helped the cause of the Institute, monetarily and otherwise. Their help has very much lightened the work of the Committee: the need of their co-operation and sympathy will be felt all the more henceforward: and nothing comforts the Committee so much, as the thought that they would be able to carry on their work, in the new state of things to be created to-day, with the full assurance of public support and sympathy, which, as will have been made evident in the course of this report, the Institute now urgently stands in need of, more than at any previous period of its brief history.

Chief of Ichalkaranji's Speech.

A FINE ACHIEVEMENT.

The Chief of Ichalkaranji, in requesting His Excellency to inaugurate the Institute, said: After hearing the Committee's report all present would agree with him when he said that it was no mean achievement to record during the two years, considering the great difficulties and the abnormal conditions under which the Committee had to labour. The idea of a Research Institute was in itself somewhat novel. When it was first broached to him, the speaker, he could not resist the feeling that following the normal run of things with them—the idea glorious—it would at least take some half a dozen years before it was matured and materialised. He was, therefore, most agreeably surprised to find his expectations in the matter so entirely falsified. The Committee had done wisely, he thought, in securing an extensive piece of land so conveniently situated with reference both to the city and the educational institutions outside the city. The plot measured some thirty acres out of which fourteen or fifteen acres which the Institute had reserved for itself, would, he was sure, amply suffice for all its future needs for the next two generations at least if not more. That the originators and promoters of this scheme were no mere dreamers was best seen from the way in which they had arranged to dispose of the other fifteen acres of the land on the lower side of the road. There was going to be established, he understood, in this area a sort of colony of the persons intimately connected with the Institute who were going to have each a small house and a garden of his own

and with the Research Institute always in view and always beckoning him to industry he had no doubt that the literary output of the Institute would not fail in time to redound to the credit of the city, the presidency and even the country.

WHAT HAD BEEN ACHIEVED.

Looking to what the Committee had been able to achieve during the last two years, it would not be wrong to expect that in another couple of years in this area where they now saw one solitary building nearing its completion they would see dozens of buildings, large and small, tenanted by students, young and old, who would fill the space with the pure and serene atmosphere of scholarship and research. In an institute like this an infinite capacity for public usefulness, went without saying. It was of course their duty as people of the East to properly appreciate their old literature and the wisdom contained in their ancient books, to critically study them and to present them in a fitting form to the notice of the world, and it was for this reason that the Conference of Orientalists at Simla had already in 1911 recommended unanimously the foundation of such an Institute, and although owing to the war and other causes the Government had to indefinitely postpone the idea he was quite sure they must have taken the steps rather reluctantly as was quite evident to him, from the sympathetic way in which a deputation on behalf of this Institute, which he had the honor to present to His Excellency last year, was received by him and also from the way in which His Excellency's Government, finding that there was a body of energetic workers willing to meet half way, came forward readily to assist the scheme with money and material. Continuing, the Chief of Ichalkaranji said:—The Institute had an unlimited future before it. It could find its own destiny and could change the temper and the tone of their scholarships, if it could bring about that happy combination of the intellectual endowments of the east and the critical method of the west which was best illustrated in this country in that revered personality whose name the Institute was to bear. He meant Sir R. G. Bhandarkar.

THE GLORIOUS PAST.

It could bring about a true understanding and a juster estimate of their glorious past and infuse in

the younger generation that habit of patience and diligence and dispassionateness and that willingness to weigh calmly all the facts of the case and refuse to indulge in premature judgments and hasty generalisation that so often marred amateur literary production. One of the happiest ideas of the promoters of the scheme was to associate with the new institute the revered name of an old Guru, Sir Ramkrishna Gopal Bhandarkar, who had been the educator of nearly three generations of students. That superb collection of old manuscripts at the Deccan College owed much to Sir R. G. Bhandarkar's diligence in building up libraries and his own private library of Oriental books was one of the best of its kind not only in Poona but even in the Bombay Presidency. But Sir R. G. Bhandarkar's activities were not merely confined to books and the class-room, but were many-sided and yet eminent in nearly everything that he touched. Belonging to a generation which had given them in one sphere or other so many of their prominent makers of the modern Maharashtra Sir Ramkrishna in his sphere of activities surpassed them by extensive reading, the searching criticism and faultless presentation. Brought up as a youth in the traditional method of the Shastris, he inherited from them the accuracy and thoroughness which had always marked the true Shastri and he added to them that versatility and breadth of view which resulted from training along western lines but which by themselves often stood in danger of being degenerated into mere shallowness and superficiality. Men of the stamp of Sir Ramkrishna were always very rare in every country, and in this country it was rarer still to see such men living to a green old age with the intellect unclouded and almost all the faculty unimpaired. Concluding, the Chief of Ichalkaranji said it was quite in the fitness of things that the Committee should have thought of His Excellency, as the most proper person to inaugurate this Institute and thereby to turn a new page in the history of Oriental scholarship in this Presidency if not also in this country. They were all pleased and grateful to him for having consented to be present on this unique occasion and their pleasure was doubly enhanced by the gracious presence of Her Excellency Lady Willingdon, who had been doing much more

than what the wife of a Governor was usually able to achieve. She had been the life and soul of many public movements and had become the load-star of all useful activities in the Presidency.

GOVERNOR'S SPEECH.

TRIBUTE TO SIR R. BHANDARKAR.

Lord Willingdon then addressed the meeting. He said:—

Sir Ramkrishna Bhandarkar, ladies and gentlemen,—It is now almost exactly a year ago that I had the pleasure of receiving a deputation of the Committee of the Bhandarkar Oriental Research Institute. At that meeting, which I ventured to prophesy would prove like to-day an occasion memorable in the history of Oriental Scholarship in India, the deputation laid before me a statement of the objects and ideals which inspired the inception of this enterprise, and I was invited to assure them of the sympathy and support of myself and my Government. Those objects and ideals were such as to command the most sympathetic attention and approval of any Government and, indeed, of any person, whether his position be public or private, to whom the highest interests of India, its venerable past and its brilliant future, are objects of deep and warm solicitude. And I shall venture to assume the right to include in this category the present Governor and the Government of Bombay. The purposes inspiring this enterprise which to-day makes an initial, but substantial, step towards attainment, were necessarily many and comprehensive, but those that were essential and fundamental among them were threefold. They looked to the past, the present and the future. They were designed to commemorate, to preserve and to advance. The first of these objects was to erect a memorial to the life and work of a great scholar, almost the first among Indians to apply to the ancient learning of his country the modern methods of criticism and research, and the leadership in that field which he asserted as a young and enthusiastic student he retains to-day in his venerable age after a life of great scholarly accomplishment as a savant whose name is familiar alike in Europe and in India. Sir Ramkrishna, I have many grounds for congratulating you on this occasion. I congratulate you in the first place on

attaining to-day the advanced age of eighty years and to my congratulations I add the hope that you will long be spared to promote by your presence and inspiration the objects to which you have devoted so long, so laborious and so fruitful a career. The attainment of great age has its burdens as well as its rewards, but I can congratulate you without reserve on being present here to-day to receive so striking a tribute of the estimation in which you are held by your fellow-citizens and to witness the inauguration of so appropriate a memorial of your labours. The direct and tangible results of such life-long devotion to the advancement of the classical learning of your country constitute themselves their own best memorial, but it must be to you a source of the most natural pride that your name will be inseparably associated with an institute, the object of which is to perpetuate and increase the fund of knowledge and the ideals of scholarship to which your life has been dedicated and to hand down to future generations the torch which it was your youthful ambition to kindle. To see such an ambition not only realised in itself, but in a fair way to become in its turn an example and incentive to the rising generation of Indian scholars is a measure of success which it is given to few men to attain. The commemoration volume which I have been commissioned to present to you on behalf of the Committee is a tribute of respect and admiration of fellow labourers in the great field of Oriental learning and the number, reputation and diverse nationality of those, who have contributed to this volume are eloquent testimony of the recognition which the world of scholarship has accorded to your work. But I think that I shall not be mistaken if I surmise that we are not assembled to-day solely to do honour to your achievements in the realm of learning. You had the privilege as a student of receiving instruction from the late Mr. Dadabhai Naoroji, whose recent death has been so universally deplored and I make no doubt that it was in part from him that you imbibed that broad humanity, that ardent desire to promote the welfare in fields other than those of learning of your fellow citizens and your country which have earned for you the sincere gratitude and affection of multitudes to whom the lore of Sanskrit and Pali must remain always something of a legend and a mystery. But though the personal aspect of

this gathering is important in itself I am sure, Sir Ramkrishna that you would be the first to agree with me that its impersonal aspect is of even greater import and significance.

PRESERVATION OF ANCIENT TEXTS.

Besides the commemorative purpose for which this Institute has been inaugurated I said that it had two other fundamental objects, the preservation and the advancement of Sanskrit and allied studies. It has long been an object of concern to scholars that among other perhaps inevitable consequences of modern developments the traditional methods of the study of and instruction in the ancient classical texts have been threatened with decay, if not indeed with extinction. Opinions may differ as to the value of these methods as a curriculum of education and intellectual discipline, or the possibility of making them in their present condition an integral part of any general educational system. But I think all enlightened opinion would concur in deploring the complete loss of a tradition which has stood for much in the intellectual history of India without any attempt being made to arrest its degeneration or provide for its replacement. While I confess that it appeals to me that many difficulties surround this undertaking, I welcome an enterprise, one of whose purposes is to undertake the task. It is a task which is peculiarly within the province of such an institute as this. To rescue from oblivion all that can be preserved, all that is most worthy of preservation in the oral or traditional wisdom of the *Shastri* and the Pundit about all to infuse into it the seeds of new life and activity, is an ambition which should command respect even from those who are sceptical of its utilitarian value. Its prospects of success, and for my part I heartily wish it the fullest measure of success.

But I confess that it is to the activities of the Institute whose aspect is towards the possibilities of the future rather than the relics of the past that I look with the greatest interest. How much remains to be done for the organization of Oriental Studies in India on a sound progressive basis to bring them into co-ordination with the most recent results of western scholarship and to render them accessible to the student, all this is much better known to many of you here than to me. Though

my association with this enterprise must be almost entirely of an honorary character I much appreciate the compliment you have paid me in inviting me to become the first President of this Institute. I accept that office with diffidence because in your labours my portion must remain that of a layman and a spectator; but I accept it with a deep conviction of the importance and magnitude of the task to which you have set yourselves and with the most sincere good wishes for the successful achievement of the great objects you have in view.

TATA BROTHERS' LIBERALITY.

It is a great pleasure to me on this occasion to refer to the fact that it is due to the enlightened liberality of Sir Dorab and Sir Ratan Tata that it has been possible to erect this first mile-stone on what I trust will prove the long and prosperous course of this Institute. I alluded just now to the fact that one of the earliest instructors of the godfather of the Institute was the late Mr. Dadabhai Naoroji. It is not inappropriate that the hall which is being built should bear the name of another illustrious Parsi, the late Mr. Jamsetji Nasarwanji Tata. I had a few months ago when opening the Cama Oriental Institute in Bombay the opportunity of speaking with appreciation of the breadth and catholicity of sympathy displayed by a Hindu philanthropist, the late Mr. Sukhadwala in his endowment of an institute for the advancement of Zoroastrian studies. To-day we have to recognize an instance of a high spirit of reciprocity in these matters, Sir Dorab and Sir Ratan Tata, in the name of their distinguished father, come forward to endow an Institute whose primary purpose is to promote the study of the classical languages of the Hindu community. It does not, I think, require any more than a just appreciation of the signs of the times to see in this happy conjunction a good omen of the spirit of the unity and co-operation between all castes and creeds in India, which is destined to have consequences transcending the dominions of scholarship and the advancement of learning.

You will not expect me to advert in detail to the questions relating to the pecuniary and other assistance which my Government hope to be in a position to make to this Institute, as these matters

are still the subject of correspondence between your Committee and the Educational Department of Government. The formation of a more extensive permanent staff of experts, the completion of the immediate necessities of the Institute in the way of buildings and other material requirements and the acquisition of endowment funds which will guarantee the due maintenance and development of the purposes of the Institute are matters to the importance of which you are fully alive and which it is unnecessary for me to emphasise. You will recognize that guarantees of this nature are necessary before Government can undertake permanent and recurrent responsibilities to be met from public funds. I have every confidence that the liberality and public spirit of the Hindu community to whose interests this Institute is more especially dedicated, stimulated, if any stimulus should be required, by the generosity of the benefaction of the Tata Brothers which has given the building will ensure that these guarantees will be forthcoming. In that event I can assure you that my Government will not be slow to accord to your efforts all the moral and material support which it is in their power to afford.

Ladies and gentlemen, I have much pleasure in declaring open the Bhandarkar Oriental Research Institute.

THE PRESENTATION.

His Excellency the Governor then announced that His Holiness the Jagadguru had made a non-recurring grant of Rs. 1,000 and a recurring grant of Rs. 100 a year to be utilised for the purchase of books on Indian Philosophy, and especially Vedanta Philosophy, and that the Chief of Ichalkaranji had given the Institute war bonds worth Rs. 2,000 on condition that the interest be used for giving free studentship to any *shastri* or graduate from the Ichalkaranji State who wished to attend the Institute for higher studies.

Principal F. W. Bain requested His Excellency to present the Commemoration Volume to Sir Ramkrishna Bhandarkar. He said Sir Ramkrishna belonged to a limited class of scholars in the Bombay Presidency who were well-known for their scholarship in Europe, and he thought the Presidency had every reason to feel proud of him. The Commemoration Volume contained contributions

from a number of scholars and was symbolical of the great esteem in which he was held in every part of the world. His Excellency in making the presentation said he was sure Sir Ramkrishna would treasure it as a token of affection and admiration of his many friends.

The volume bears the following inscription:—

'This volume of essays, written by his friends, pupils and admirers from different lands, is dedicated as a mark of respect and affection to Sir Ramkrishna Gopal Bhandarkar upon the completion of his 80th year on Friday, the 6th of July, 1917.' The volume contains forty original papers from eminent Orientalists, sixteen from scholars in Europe and twenty-four from scholars from different parts of India. It also gives a life-like portrait of Sir Ramkrishna besides seven illustrations.

ORIGIN OF THE INSTITUTION.

Sir Ramkrishna thanked His Excellency for making the presentation and Lady Willingdon for adding grace and dignity to the proceedings by her presence. He also thanked the contributors to the volume. He was particularly grateful to the latter, he said, because, in the republic of letters no distinction was made between people belonging to different races and honour was bestowed with strict impartiality, whether the recipient was a European or an Indian. Referring to the Indian contributions, he said, his great object in life had always been to encourage scholarship among his countrymen and he could say from the contributions made by them that the time was not far away, when this desire of his would be fulfilled. He had considered the Institute from an independent point of view. The first time the thought of such an institution came to his mind was when he attended the Conference of Orientalists at Simla in 1911. It was then suggested that in order to avoid the necessity of sending young Indians to Europe for scholarship they should have an Oriental Institution in this country. It was originally resolved that such an institution should be started at Calcutta as there was a good University library and other facilities there. But, he thought, that culture was not fully represented by Calcutta because the tendencies of Bombay men were quite different from the tendencies of Calcutta men, so he advocated the

establishment of three at least of such research institutes—one at Calcutta, another at Bombay, and a third at Madras. This proposal did not fructify in consequence of the war, but, through the labours of his friends, as far as Bombay was concerned, it had come to a condition promising success. He had now decided to hand over his library of oriental books, containing 2,500 volumes to this Institute. He did not like to think that after his death they should be sold by the auctioneer's hammer. He bequeathed them under the hope that it would be able to make to this Institute progress through that means.

Dr. S. K. Belvalkar, the Secretary, thanked Sir Ramkrishna for the gift of his library to the Institute.

The Hon. Mr. R. P. Paranjpye then moved a vote of thanks to His Excellency and Lady Willingdon. He said that as this was the first public occasion after the official announcement that the term of His Excellency's office had been extended when His Excellency had taken part in this ceremony, he took the opportunity of saying, how extremely grateful they all were to the Home Government for giving them a longer period of His Excellency's rule.

The Hon. Mr. Lalubhai Samaldas in seconding the proposition fully associated himself with what had fallen from Mr. Paranjpye. He said, they were grateful to His Excellency for having acceded to the request of the Secretary of State and decided to stay on and give the people of the Presidency the advantage of his rule for a longer period which, he hoped, would extend over many years to come.

His Excellency, replying said:—I am extremely grateful to both the mover and the seconder of the resolution for the kind reference they have made to the action of the Secretary of State in allowing Lady Willingdon and myself a further opportunity of having close association with the Presidency of Bombay, in which we have passed a rather strenuous and, I hope, you will admit to a certain extent a useful life.—*The Leader*.

PATNA UNIVERSITY BILL.

Report of Select Committee.

Substantial Changes in Measure.

SIMLA, July 7.

To-day's *Gazette of India* contains the Select Committee's Report on the Patna University Bill along with the text of the measure as amended. The following in the text of the report:—

The revised Bill annexed to this report is the result of lengthy deliberations by which alone we are enabled to submit a unanimous report. We now proceed to outline briefly the main changes of substance we have made in the Bill which was referred to us by the Council.

Notwithstanding that there is considerable body of opinion opposed to this course we have, after considering and giving great weight to the views of those of our colleagues who came from Bihar, included the Diamond Jubilee College, Monghyr, among the external colleges named in the Bill, we have modified the powers of the Chancellor by the substitution for the provision in the original Bill of a provision based on section 6 (2) of the Benares Hindu University Act, 1915 which we think will confer all necessary powers in regard to matters with which it deals.

We have reduced the term of the Vice-Chancellor's appointment from five to three years as we think it undesirable that an officer should be appointed in the first instance for so long a period as five years. We also think it desirable that his power of appointing officers and servants should be limited to posts carrying a pay of less than Rs. 200 per month and that his powers in certain other respects should be modified.

We have transposed the provisions dealing with the Senate and the Syndicate, placing those dealing with the Senate first as we think that the arrangement is more suitable having regard to the position which those bodies hold respectively in the University scheme.

We have raised the number of ordinary Fellows of the Senate from a minimum of 40 and a maximum of 60 to a minimum of 60 and a maximum of 75. We have provided that the Vice-Chancellor shall be an *ex-officio* member of the Senate and that the

Principal of every College in which instruction is given to the degree standard shall also be an *ex-officio* member of that body. We have provided for an elected body of fifty ordinary Fellows in place of twelve provided by the original Bill. There will thus be a substantial majority of elected Fellows in the Senate as proposed by us. Of these twenty will be elected by the teaching staffs of the colleges, five will be elected by graduate teachers of schools in which instruction is given to a standard to be prescribed by regulations and fifteen will be elected by a special electorate of graduates, the remaining ten will be elected by such associations or public bodies as the Chancellor may empower in that behalf. We further lay down in the Bill as revised by us that the regulations shall provide for the adequate representation on the Senate of all the Faculties of the University and of persons permanently resident in the Orissa division.

We have declared generally that the Senate is to have entire management and superintendence over the affairs of the University and that it shall exercise all powers of the University not otherwise provided for. We have indicated in some detail certain powers which we consider should reside in the Senate and on the other hand we have specified the matters in which the Syndicate will have power to act independently subject to review by the Senate on a reference made by not less than six members of the Syndicate jointly. We have had great difficulty in arriving at a satisfactory conclusion as to the distribution of power between these two authorities in view of considerable difference of opinion among individual members of the Committee on this point, but we think that the provision in the Bill as revised by us is a reasonable compromise.

We have fixed the term of office of the first Syndicate at two years as we think this is sufficient having regard to the manner in which the first Syndicate will be appointed. We have added the Principal of the Ravenshaw College to the *ex-officio* members and have provided that all ordinary members of the body should be elected by the Senate from among its members. As to the constitution of ensuing Syndicates we have made it a statutory requirement that this body shall contain

at least one person permanently resident in the Orissa division, not less than seven members of the University staff or the teaching staff of the colleges and not less than three other persons who are not following the profession of education. It will be observed that the general control of the University affairs has been transferred from the Syndicate to the Senate in deference to the wishes of those members of the Committee who pressed for this change.

We have required the concurrence of the Senate and the local Government to the admission of educational institutions as colleges. As regards external colleges teaching to the degree standard we have provided that the condition as to location in the four particular towns may be dispensed with in any particular case by the direction of the Governor-General in Council.

Similarly for the deprivation of a college of any of its privileges we have required the concurrent decision of the Senate and the local Government. As regards clause 11 which enacts that on the commencement of the Act the existing privileges granted to other Universities shall be terminated, we have provided that the privileges so terminated shall be deemed to have been granted by the Patna University. We think such a provision is eminently desirable as some provision should be made for educational institutions whose privileges have been taken away and to cast on them the onus of applying in the first instance for admission would be to our mind unreasonable.

We altered clause 13 so as to require the publication of the accounts of the University in the local official Gazette. We think that publicity of this nature is desirable.

We have recast clause 14 which deals with the regulations, separating those regulations which, under the Bill as revised by us, must be made and those which may be made, and we have naturally had to make many consequential alterations in this clause to meet the changes which have been agreed to by us. We have further recast the sub-clauses of the section which deal with the manner in which the first regulations should be made. We need not enter into a detailed account of the changes as they are perfectly clear from the revised Bill. We do not think it necessary to allude in detail to the various drafting changes which we have made in the hope of improving the form of the Bill.

The Bill as revised by us is substantially changed from the Bill which was referred to us and we therefore recommend that it be republished.

Our colleagues Messrs. Basu and Sastri desire that we should insert in our report a statement that they wish it to be recognized that the Bill as revised contains certain provisions, more particularly as to the relations between the Senate and the Syndicate, which, though accepted by them for the Patna University, embody principles which they do not consider applicable to the Universities in India generally.—*The Leader*.

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THE RT. HON. MR. FISHER'S ADVICE TO TEACHERS.

The Rt. Hon. Mr. Fisher, President of the Board of Education, gave the annual address to outgoing students at the Stockwell Training College of the British and Foreign School Society on June 22.

Sir Evan Spicer, who presided, said that Mr. Fisher had gained their confidence by the proposals he had put forward, and this old Society would be prepared to follow his lead. Started 110 years ago the Society had done much important work in a quiet way with a good deal of the Quaker spirit. In the past, good work had been done with British schools, and the principal work now was by training colleges at Richmond, Saffron Walden, Isleworth, and Stockwell. Throughout the colleges had been undenominational. The Society would not lag behind in carrying out the programme the President might lay down.

Mr. Fisher said there had been so many kind references to him in his position as President of the Board of Education that he felt it would be only proper to remind his audience of an observation made the other day to him by an old Oxford friend: "I have not yet made up my mind whether you are going to be a liability or an asset." To this he replied, "You may make up your mind upon that; I have come into office in the character of a financial liability and as a financial liability I intend to remain." He had been reminded that this was an old college; it had occupied its position, he thought, since 1861. When an institution had survived so long a period with great credit and the unlimited confidence of those who supported it, then it was not an unreasonable prophecy that Stockwell College was destined to enjoy another century of unlimited usefulness.

THE EDUCATION OF WOMEN.

During the years covered by the existence of the college on that spot very great changes had

come over the country, and to his mind no change had been more productive of benefit and happiness to England than the spread of education among women. There was a time—not very far distant—when a girl was regarded as sufficiently educated if she could strum a few tunes on the piano and perhaps sing a little, no matter what her aptitude for music; paint or attempt to paint flowers and landscape in water colours, no matter what her aptitude for art or design; and had acquired a few other accomplishments of the kind. Anything on the philosophical side of education was regarded as outside the sphere of female influence, and natural science was deemed to be a region into which no woman could properly or safely intrude. We had changed all that now, and no change borne in upon us by experience in the present war had been more impressive than the advantage to the state of the energetic services of educated women. Speaking to young women who were going into the teaching profession, and with pride, having been a teacher himself, he would say in the first place that teaching was a difficult art, it was no trick or dodge, it was expression of the whole character and intellect. To teach well the teacher must in the first place be perfectly natural and simple. Children had a happy, almost mysterious, gift for detecting imposture, pomposity, or pretence; their innocence was curiously alive to anything unreal and artificial. His first piece of advice to young teachers was, therefore, be natural, be yourselves. In the second place anybody in the teaching profession should cultivate a high sense of enjoyment; nobody could teach well in low spirits. If you mean to teach well you ought to flood the room with vitality, and you ought to be able to communicate your zest and enjoyment fully to the little children under your charge. Enjoyment was not a sin, it was a duty. One of the first duties of a good teacher, therefore, he reminded them, was to be happy if they could, and to be simple; it was not always easy in the

refer to them here. Those who have to teach the English language to young children are put to the painful necessity of resorting to various subterfuges by which they can make their pupils believe in the identity of the written with the spoken form. If the difficulties are great in the case of those to whom English is the mother-tongue, they become trebly great in the case of foreign students. Nothing less than a clean confession can save the situation. The learners have to be plainly told that, while imagining that they are learning only one language, they are as a matter of fact learning two languages—one of the eye and the other of the ear. It is therefore found necessary to make use of a consistently phonetic alphabet and for this purpose the symbols used by the International Phonetic Association are being widely taught. Generally a beginning is made in phonetic script and little by little a transition is effected from the phonetic to the conventional spelling. The book under review is an ingenious attempt to do away with the necessity of learning a phonetic alphabet before being introduced to English Orthography.

Dr. Craigie's contention is two-fold. First, he thinks "that the ordinary spelling of a large number of English words is really as phonetic as it can well be, whatever charges may be brought against English Orthography as a whole." Secondly, he considers that the common method of using phonetic transcription involves the disadvantage of making the impression left in the eye, by the ordinary spelling, comparatively weak. Since spelling is merely a matter of memory, he is of opinion that by a judicious use of diacritics and by marking the stresses of syllables, whenever necessary, a practically phonetic scheme can be worked out. He adds that as the foreign student—for whom mainly the book has been written—gets more and more familiar with the sight of English words in their conventional garbs, this extraneous help can be dispensed with. He has therefore worked out, in the book before us, a scheme of sounds and symbols on the lines generally in use in dictionaries and added some fifteen pages of reading matter with pronunciation marked according to the scheme detailed in the previous pages.

We are inclined to doubt very much whether the scheme can meet with general approval. First, we are afraid that the learned Doctor has underestimated the number of unphonetic spellings in the English language. The readers of the *Educational Review* have but to be referred to the back numbers of the *Review* to form their

own opinion about the matter. Secondly, we have to point out that diacritics are always a most painful eyesore. We are already having too many elements in our education that go to affect the eyesight and we cannot afford to have one more. Thirdly, we do not consider that the current spelling can be better taught than by placing it side by side with a strictly phonetic spelling. The very contrast between the unsystematic, chaotic spelling and the systematic, consistent spelling is sure to produce such an indelible impression upon the mind as to fix in the memory both the correct spelling and the correct pronunciation. Fourthly, we have to note that there is still a pretty large number of exceptional words to be learnt as they are. And lastly, we do not see any strictly logical connection between the sounds and the symbols used in the specially marked system. Perhaps we may add, if we have the space, one or two matters of detail. So on the whole we are not quite sanguine about the practical utility of the scheme put forward in the little book before us, though we feel sure that Dr. Craigie has spent a good deal of time and patience over it.

HINDU MIND TRAINING, BY AN ANGLO-SAXON MOTHER. WITH AN INTRODUCTION, BY S. M. MITRA. (LONGMANS, GREEN & CO., LTD.) 10s. 6d.

We confess we are quite disappointed with this attempt at the exposition of Hindu psychological methods in education. It is undoubted that a scientific study of the educational methods of our ancestors must be of great use to us in ordering our educational systems of to-day. But we are afraid we have not been brought into any near contact with them by the book under review, in which we do not behold any attempt at arriving at what exactly the methods were like. The only obvious course in writing on a subject like this, is to examine the literature and philosophy of ancient India and gather together the material that has a bearing on the question, but it is just what the author has not attempted in the least measure. We thus fail to see entirely the historical authority for presenting the contents of this volume as an exposition of Hindu mind training.

The actual contents of the volume are again equally disappointing. The only idea laying any pretension to resemblance to educational method in the volume is that of putting questions and eliciting answers, an aspect which is by no means

unknown to modern education and which cannot furnish even in a meagrely comprehensive sense adequate exercise for mind training. It was at least not worth while writing a volume of five hundred pages to convey the single idea that it is useful for the teacher to put questions to the student and draw him out in answers.

One or two examples from the book will serve to show how futile, pointless and of little consequence even these questions and answers are:—

Q.—What is the nature of the feeling inspired by a lovely face?

A.—A beautiful face with finely chiselled features, soft eyes and spiritual expression makes one feel that one could rely upon its owner.

Q.—Does emulation imply envy?

A.—It implies admiration of another's achievements, but not envy.

Q.—What qualities were needed to bend the bow, string it and shoot the mark in competition like this?

A.—Great physical fitness, a true eye, perfect self-possession and self-mastery.

We confess we are nowhere nearer mind training by such questions and answers. The first is a matter bearing on temperament and does not admit of any intellectual exercise; the second relates to the exact meaning of a word for which the dictionary is the best authority and we do not know where *Hindu Mind-training* comes in, in being able to say that a true eye and perfect self-possession are required for being a good archer.

It is pleasing to note at least one redeeming feature in the book—the stories which furnish the basis for these questions and answers are beautiful episodes narrated in a graceful style, though the constant interruptions with questions interfere with the even flow of the narration. We are decidedly of opinion that if the stories are collected into a separate volume, they will constitute a more useful publication than this unsuccessful attempt at the exposition of *Hindu Mind Training*.

LECTURES ON STYLE AND COMPOSITION, BY E. CLASSEN. (MACMILLAN & CO., LTD.) 3s. 6d.

A correspondent writing to the *Educational Supplement of the London Times* has been drawing attention, in a series of articles on the *Rediscovery*

of *English*, to the increased interest shown to English studies in recent years and books like the one under review bear testimony to the fact. Mr. Classen has presented a very fine analysis of style, entering into a brief but lucid examination of all its elements. That he is no mere theorist, confining his attention to lifeless and artificial distinctions, is patent by his liberal grasp of the spirit of literature. He has, for instance, no hesitation in declaring that the "essence of style is personality," or "slang, for example, is not objectionable because it is slang, but because some forms of it are in their tendency opposed to the best interests of the language." We have great pleasure in recommending the book to all students of rhetoric and composition.

PUBLICATIONS RECEIVED.

Practical Physics Note Book for use by IV Form Students, by C. P. Venkatarama Aiyar, B.A. Trivandrum: K. Narayana Aiyangar & Sons. 5 as.

Myths of Ancient Egypt, by Lewis Spence. London: Harrap. (P. T. I. Book Depot, Bangalore).

Pages of Britain's Story: 597—1898 A.D., edited by J. Turrel. Oxford: Milford. 2s. 6d. net.

The Book of School Games, by C. E. Hodges, M.A. London: Evans. 3s. 6d. net.

The Teachers' Book of Music for Infants, by Clara E. Grant. London: Evans. 1s. 6d. net.

The New Testament and its Writers. Madras: C. L. S. 5 as.

Direct Method Series: English Reader No. 1. Madras: C. L. S. 5 as.

India and Telugu Missions. Madras: C. L. S. 5 as.

William Carey in Tamil. Madras: C. L. S. 1 anna.

Indian Educational Notes.

Tanjore Educational Exhibition.—The exhibition closed on the 17th instant having been on show for five days. A series of useful lectures were delivered in the course of the exhibition, on 'the School Museum' by Mr. Pichamuthupillai, on 'Nature Study' by Mr. Sree Rangachariar, on 'Kindergarten Methods' and on 'Astronomy' both by Mr. K. S. Appaswami Ayyar, on 'Our Physical Sins' by Rao Bahadur Doctor Rama Rao, on 'Our Food' by Dr. Swaminathan and on 'School Gardens' by Rao Bahadur K. S. Venkatrama Aiyar.

The distribution of prizes and certificates was done on the closing day. Mrs. Phillips gave away the prizes. Mr. Wallace, the District Judge, Mr. and Mrs. Narayana Ayyar, Mr. W. C. Douglas, were present.

The Government Training School, Tanjore, distinguished itself by the number of prizes and first class certificates that it won. The prize for which schools as such were eligible for competition—viz., the prize for the best collection of Kindergarten work was won by it. The collection exhibited Kindergarten work in a large variety of its phases, including the Kindergarten stages of the learning of the Three R's. A set of Montessorian appliances made by the schools formed part of this collection. The Kalyanasundrum High School and the S.P.G. High School received a considerable number of prizes and certificates, the former distinguishing itself by advanced work in Botany. Among the schools which received prizes and certificates of merit were the Training School for Mistresses, the Mission Girls' School in Tanjore, the Findlay College, Mannargudi, the Municipal High School, Mayavaram, the Town High School, Kumbakonam, the National High School, Mannargudi, the Secondary School, Umayalpuram, the Roman Catholic Secondary School, Tanjore. The manual training work of the Municipal School, Mayavaram, and the Town High School, Kumbakonam, deserve special mention. The Exhibition was a brilliant success. It is to be hoped that such exhibitions will be held hereafter once in every two years.

Students and Politics—Bombay Law Students' Memorial.—A petition signed by five hundred graduates of Indian Universities attending the Government Law School in Bombay to qualify for LL. B. examination has been submitted to His Excellency the Governor of Bombay in Council praying that the application to them of the recent Government circular restraining students from attending political meetings should be rescinded. The memorialists point out that they are already graduates and fully in a position to realize their responsibilities. The Government have also recognised this fact having under the Bombay Municipal Act granted to gra-

duates franchise of electing Municipal Councillors to the Corporation and under the Universities Act, franchise of electing Fellows of University. They claim that they have thus already been admitted into the civic and political life of the country under the sanction of the Government.

Bombay University Convocation Ceremony.—The Annual Convocation of the Bombay University for conferring degrees was held on the evening of Tuesday, the 21st instant, Lord Willingdon as Chancellor presiding.

CHANCELLOR'S ADDRESS.

After the ceremony of conferring degrees, His Excellency the Chancellor addressed the new graduates. He said it was not to be understood by the new graduates that they had reached a concluding stage of their career. They should pause and assess their achievements not as conclusive and settled, but only a preparation for the serious duties of life. They were not to consider their stage of discipline over. The subsequent stage of discipline of liberty differed from the stage of discipline of tutelage only in the restraint being exerted by themselves. Such restraint and discipline was a condition of the right conduct in their future life as citizens. He appreciated the enthusiasm of youth and their passionate desire for service in that wider field, but ambition and enthusiasm were to be tempered by soberness and resolution to overcome difficulties and to enable them to do that was the fundamental aim of all education. If they pondered on those words they would successfully control all difficulties of their future life. His Excellency finally welcomed all the new graduates who obtained the degrees that day.

VICE-CHANCELLOR'S ADDRESS.

After the usual ceremony was over Mr. C. H. Setalvad, the new Vice-Chancellor, delivered the Convocation Address. At the outset, he paid an eloquent tribute to the memory of the late Dr. Wordsworth and Dr. Dadabhoi Naoroji and then passed on to war and the formation of the University Company. He was glad 350 students had applied for enrolment in the company, but confessed that he shared the Chancellor's feeling of disappointment expressed the other day, that a much larger number had not offered. He was sure the Chancellor would be ready and willing to exert his good offices in removing any difficulties that may be standing in the way at present. Mr. Setalvad next referred to the success of the work of the University. It was fully sixty years ago that the Bombay University was established as the outcome of the famous Educational Despatch of 1864, which laid down a comprehensive scheme for national education. They had been repeatedly told by some candid friends that the work of the University had been a dismal failure, that their system of University

education and examination was a delusion and a snare, that their colleges were nothing more than factories for cramming. He would ask these pessimists to look at the products of the University who in all grades of public work were serving the State with conspicuous ability and integrity to look at the medical graduates who were giving medical relief and help to their fellow-countrymen in the towns and villages of the Presidency and graduates in law who were following the exciting profession of law maintaining the high honour and tradition of their class and architects and engineers that were ministering to the proper and sanitary housing of the population of large cities and above all he would ask them to look at the love of education, spirit of self-sacrifice, sense of duty to educate their fellow-beings that had been stimulated and have found active manifestation in the great work that was being done by the Deccan Education Society in maintaining the Fergusson College and the new English School, Poona. Continuing, Mr. Setalvad said that while he repelled firmly the charge of failure sometimes levelled against the Bombay University he should not be understood for a moment to assert there was no room for improvement. They must clearly realise some of the very serious drawbacks under which they laboured. The essential conditions of success of a University, the Vice-Chancellor maintained, were two. The first and foremost was that the University should in fact be made to feel that it was independent of any external authority and realise the full measure of its own responsibility. The second essential condition of success was that effective control of the government of the University should be vested not in professors and teachers but in the hands of men of affairs and business men who being themselves products of the University took interest and pride in its further progress and development. He pleaded for making the University more broad-based and for further liberalising its constitution by substantial extension of the elective principle. At present 80 out of 100 Fellows were nominated by the Government and ten were elected by registered graduates and ten elected by the Faculties.

Dealing with the aim and purpose of a University, he said it must be to create a habit of mind which would last through life based on correct ideas of

freedom, justice and wisdom and to create a capacity for discipline and sacrifice. The intellectual training was but of secondary importance. Education must make men of character the mainsprings of which should be dutifulness, courage and honour. Contrasting English and German national education, Mr. Setalvad asked them to look at the trained brain power, scientific equipment and intellectual capacity that was brought to bear on the prosecution of war by the British and above all the immense sacrifices the British nation was making in men and treasure. He asked them to see millions of young men, flower of the nation's manhood from all grades of society that had gone out voluntarily to fight, not for any lust for power or territory but for the defence of the weak and the defence of civilisation themselves in order that humanity might profit and live in peace and all nations, however small, might be left to work out their own destiny. He asked them to contrast this with the results of German education. The scientifically organised and highly perfect and efficient system of national education in Germany had produced the ideal of German omnipotence and Germany waged this war in order that she might be able to impress her will on the world and that all other nations might live and progress according to the German dictation, she had cast to the winds all accepted and sacred notions of honour, of chivalry and fairness. The system of education which made it possible to win over the intellectual power of the nation inhuman ends must be woefully defective. The speaker then dealt with the essentials of national education and pointed out at present they were wading merely with a mass of undigested knowledge. They required all things to be learned at once not one well but many badly. He urged the courses of study and methods of teaching should be so remodelled as to remedy effectively the existing defects. He pleaded for more education in all its branches and concluded with a word of advice to the new graduates. Mr. Setalvad told them that with the advent of important administrative reforms that were sure to follow on the readjustment of the Empire after the war, they would have to bear greater responsibilities than former generations and they must rise equal to those responsibilities.—*The Hindu*.

We are asked to publish the following:—

Mr. MONTAGU'S INDIAN SPEECHES.

As a companion volume to "Morley's Indian Speeches," Messrs. G. A. Natesan & Co. of Madras will issue shortly a comprehensive and up-to-date collection of Mr. Montagu's Speeches on Indian subjects. The collection will include Mr. Montagu's Budget Speeches in the House of Commons when he was Under Secretary to Lord Morley at the India Office. It will include also Mr. Montagu's Guild Hall Speech on "Indian Affairs"; "Indian Land Policy" delivered at the Liberal Colonial Club, London, and several other papers. The collection is brought up-to-date with the full-text of his speech in the House of Commons on the Report of the Mesopotamian Commission only a few days before his appointment as Secretary of State for India. Every effort is made to make the collection as exhaustive as possible.

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COOPER, Publishers, BOMBAY.

The Educational Review.

The special meeting of the Senate held on the 17th instant was called to consider the recommendations of the Royal Commission on Public Services in India

in regard to the appointment of a body of research professors primarily, and with other matters in the report connected with University education. The agenda for the meeting as finally issued show in addition to formal business propositions which fall into three classes roughly: (1) Those connected with University education but remotely, though having an important bearing on University education, (2) Motions which as they appear on the agenda paper amount to recommending not merely the postponing of the appointments recommended, but even implying the abolition of those that exist, (3) Those that have for their object the adoption of the recommendation, indicating the mode of recruiting thereto. To the first class belong the motions set down against Mr. Ramalinga Reddy's name, and motion II of Mr. Krishnaswami Aiyangar. To the second, belong the motions of which Mr. Natesan had given notice; and to the third belong that of Lieut.-Col. Miller and proposition I of Mr. Krishnaswami Aiyangar.

In regard to the first of these groups we must say there is a good deal to be said in favour of the separate points raised in the scheme of Indian educa-

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tion generally. But it must also be said their connection with University education is, comparatively speaking, remote. The position of the vernacular in secondary education is clearly matter for the department to consider, and such recommendations ought to be brought home to them, although we are of opinion that the University should have an influencing voice in the final decision that may be arrived at. It is rather strange that Mr. Reddy should have given notice of his proposition II in regard to the increasing of the age of Matriculation by two years. There is so far no particular recommendation in the report of the Commission in regard to this matter. All that the report does is to draw pointed attention to the disadvantages of students at this age being associated with those working up to a degree, and to state that this association changes materially the nature of the work at the colleges preparing for the University. The defect pointed out can be remedied, and we believe, is expected to be remedied by throwing back the two years Intermediate course on to institutions like the second-grade colleges under the University. This is nothing novel as we know that a considerable body of educational opinion, at the time when the new regulations were in the making, was in favour of such a course, and it was definitely held that by the abolition of the old First Examination in Arts, a specialization of studies was made to begin much too early for the students concerned. The experience

of more than 10 years just goes to confirm that view. That is certainly a matter which comes under the purview of the University, but should have been brought in a different form altogether. The only objection to such a course would be that it throws the University course, as at present arranged, into the melting pot again and that is not business that a special meeting called for the purpose for which it was brought together, was, in our opinion, competent to do. The other motions of which Mr. Reddy had given notice partake of the same character and having regard to the comprehensive nature of the changes that these will together involve we are quite satisfied that they were ruled out of order. Compared to these motion II standing in the name of Professor Krishnaswami Aiyangar seemed to us to cover the same ground and just calls merely for a representative committee to consider the whole question. We should have much preferred that he did not withdraw this motion as most of these questions do require to be considered sooner or later, and the appointment of an influential and representative committee would have been welcome rather earlier than later; and we would very much have liked this question taken up in right earnest and the matter threshed out thoroughly by a large committee of experienced educationists and others.

Mr. Natesan's motion said in effect that the University professorships as such are a luxury and that they should not exist at present. Apart from the

technical defects in the propositions which were thoroughly discussed at the meeting the question from the point of view of higher education is frankly retrograde, notwithstanding Mr. Natesan's admission that he did not thereby mean to put an end to the existing provision in regard to that matter. We have had very near 60 years of University education already which so far as it goes has been of immense service to the country, but it would be far from underrating the value of this University education if it is pointed out that in the higher sense of University education, that is the advancement of knowledge and the creation of a love of learning, at least in a select class of people, this modern system of education has proved a thorough failure. As the Commission rightly pointed out if there has been a certain amount of original work done and a certain capacity for it exhibited, it is not because of the character of the University education imparted, but rather in spite of it. We have lost the love of learning for its own sake and the desire to advance it that had obtained till the advent of this new system by the perpetuation of a class of leisured people devoted entirely to this purpose though on a somewhat archaic line. That has gone out of existence; and what is the modern substitute that we have for it? None at all plainly. Is this a desirable state of things in itself? We hope there will be absolutely no doubt about the answer. The only reasonable objection that could be offered therefore to the institution of

research professoriates is the practical one that for the filling of such places we hardly get the right cut of men. The men imported usually are not the best, and most of them hardly fetched up enough enthusiasm for their work to advance it materially. At any rate it may fairly be said that this has been the past experience as the Public Services Commission themselves admit. In various practical fields of research, such as agriculture for instance, as the Commission point out the men that come from foreign countries have to learn elements, here, of Indian agriculture and have a great deal to forget as they say before they can begin work. Of such defects each possible department of research in the country, shows similar, if not the same, disadvantages. The best course naturally therefore, in a matter like this, is to fill up such appointments with men in the country, and give them such facilities as would enable them to graft that which may be useful to what perhaps actually obtained. Mr. Natesan proposes to bring about this consummation by sending out our graduates to be trained in research in Europe or America. The other alternative would be to fetch out a few professors in the various branches and associate with them as large a number of men, capable of research work themselves, as possible that they might assimilate what is worth having from them. As against this last we are aware that we do not get the best men nor are these men inclined to pursue research to the point of originality in a number

of cases. Admitting this, it is to be pointed out that the chances of students sent to Europe turning out research men are about as bad. It is not possible to find capacity for research in a student while at college, and the student that does the best in an examination of a rather competitive character, it may be said generally, is not the man that turns out the best research man. The faculties required for success at competitive examinations are not the faculties that go to build up a successful research man. On this account therefore it is, that we must disapprove of the second part of Mr. Natesan's motion, though on other grounds and for other purposes, we certainly are of opinion that as many students as may be, should be enabled to go to foreign countries and return to serve their mother-country. Our only objection is that that is not the way to build up a body of research men. We are aware that it is often said that research is a matter which is an ornament to the educational system and this can afford to wait till the needs of the country in education are met. We fear the comparison is bad. It would be far truer to put the same idea in another form, that because we wish to run a race with other nations economically, or industrially, we want nothing more than a strong pair of legs in a practical course of education, and therefore we need not take so much care of the head. No system of education can thrive here or anywhere else unless there is a certain unity and a community of spirit in

matters purely educational from the beginning to the highest point reached in the system. We do want a practical twist to primary and secondary education. We do want equally a strong infusion of an academical spirit in higher and University education. The one cannot thrive without the other. The starvation of the one, whichever it be, is bound to starve the system as a whole in course of time. It is none too soon to adopt the recommendation and set about it seriously to remedy this defect. research men are not easy to get and research work is not made to order. This kind of man requires as much elaborate training and the work requires a great deal of patience and persistent labour. This part of the system is not built any sooner than any other part, and there is no use speaking of it as if this were a thing that could be raised by a wave of the magician's wand of a Government order or a resolution of the Senate. We have to begin seriously at the one end as at the other and all along the various stages of the middle. The question is not whether we can afford the one or the other, but what we can afford to have on the whole in an organised co-ordinated system, head, foot, trunk and all at once. If an illustration of this position were wanted, we have only to draw attention to a representation made a few weeks ago to the Right Hon'ble Mr. Fisher regarding the possible neglect of the Humanities in post-war schemes of education in England. The reassuring reply of the Presi-

dent of the Board of Education ought to have its weight assigned to it in these discussions. We deprecate therefore the spirit, as we understand it from the words of the resolution standing in the name of Mr. G. A. Natesan, and we are pleased to note that his ideas were, in essential matters, different from what his words imported. It is satisfactory that the motion was lost.

Professor Krishnaswami Aiyangar's motions were conceived, as it appears to us, in the right spirit and exhibit commendable moderation in the demands they make. Even so the small amendment to proposition I, approving of the Commission's recommendations, of which Mr. Hunter had given notice and the explanation he gave for asking to introduce the modification showed clearly that there are people that would not accept even the most reasonable propositions if they go against their own interests. The Commission themselves recommended the encouragement for research work, only subjects in which such work could be carried to a point of originality, and indicated unmistakably the exclusion of such subjects as could not be carried to that high degree of investigation. Mr. Hunter's setting up a plea for the recognition of such as were expressly excluded, is a clear exhibition of this uncompromising spirit which has been the bane of the educational system as it obtains at present, and demonstrates the complete absence of an academic spirit. It is particularly satisfactory therefore to note that the

Professor withdrew motion III standing in his name, as it must have been clear that it might be worked in a way prejudicial to the best interests of research. The Professor's motion taken as a whole provides, in our opinion, the best guarantee for giving research the best chance of thriving in the country. The first part approves of the institution of research professoriates, the second places them under the control of the Universities, and the third provides for giving Indian talent the fullest vent in this direction provided only that the resolutions are given effect to honestly. It is just possible to get under the resolutions and work them badly, and this contingency it is not possible for resolutions of bodies like the Senate to avoid. We would commend the resolutions to the attention of the authorities concerned, and would bespeak the working out of the views embodied in the resolution with a single eye to the advancement of the purpose that it is intended to promote, in the best interests of the country. As it was clear from the original motion IV (1) (d) Indians who are engaged in educational work and who have shown some capacity for original work should be given scope for giving it the fullest development. As amended it is somewhat broader, and seems to include in substance proposition II of Mr. G. A. Natesan. For reasons that have already been stated above, we would prefer that the spirit of the original motion be kept in view and everything possible done to develop and utilize

any talent that may be shown in this direction among those engaged in educational work. If any such talent is shown in India it is an exhibition of the faculty for pursuit of knowledge under difficulties. It is nothing else in India as we are at present. Such talent, with adequate facilities, is certain to bloom into a richer blossom, and we are anxious that for the good name of the University such should no longer be neglected till some accident should discover itself wasting away 'in desert air.' We congratulate the Senate of the University on the adoption of such a commendably reasonable course in regard to this important matter, and we hope that it will mark an epoch in Indian education.

The affording of proper guidance to Indian students proceeding to foreign countries for education has always been a serious problem and we are glad to notice that various attempts have been made in recent years to improve matters in that direction. In addition to official organisations started under the auspices of the Secretary of State in England, it is well-known that the Universities of Oxford and Cambridge themselves have now arranged to give special facilities, while all along there have been private associations of people interested in Indian students working at several educational centres in Great Britain. The recent Conference of Secretaries to Advisory Committees in various Provinces held at Simla considered the question of affording

in relation to Secondary Education. In view of the interdependence of the question of the use of the vernaculars as the media of instruction and the efficiency of the teaching of English, the two subjects have been combined together in the agenda which is as follows:—

1. In discussing the teaching of English and the medium of instruction there are two widely different points of view. There are some who would wish to see instruction in certain subjects carried out through the medium of vernaculars even to a very high standard, and there are others who would introduce the teaching of English freely in primary schools and at a very early stage. It is recognized that under certain circumstances some instruction in vernacular may be desirable even in University courses and of English in the early stages of primary schools. The present purpose, however, is to leave such cases out of consideration as far as possible and to confine attention to the teaching of English in secondary schools and to the medium of instruction in those schools. The object in view therefore is to see how far modifications in the present system may be effected so that pupils may (a) obtain a better grasp of the subjects which they are taught and (b) complete their secondary course with a more competent knowledge of the English language than at present.

2. The first essential, therefore, is to understand the present position which varies in several provinces. It may generally be said that a boy in an English vernacular secondary school begins to learn English as a language between the ages of eight and ten and is taught all or most subjects through the medium of the English language from about the age of 13 to some three or four years before the University course begins. Those actively engaged in the administration and work of teaching therefore will be invited to explain the working of the system obtaining in their provinces and to point out (a) the stage when a pupil begins to learn English as a lan-

guage, (b) the stage when a pupil begins to receive instruction through the medium of English, (c) to what extent is the medium of English introduced gradually or not?

3. (a) At what period in the pupil's career should English be taught as a language? Is it better for him from the point of view of his ultimate mastery over the language to start its study at an early age, or only to receive such instruction after he has been well grounded in a vernacular?

(b) Do the younger pupils gain satisfactory knowledge of English by their instruction through the medium of that language, or do they merely gain a smattering of incorrect and unidiomatic English?

(c) What is the general experience of those boys who have passed through the vernacular middle course and then studied English at a high school? How have such boys distinguished themselves in the matter of English in competition with those who have studied from an earlier period through the medium of English?

(d) By what methods should the teaching of English be conducted? Does the present system attach too much importance to the knowledge of English literature as against the necessity of learning to speak and write the English language correctly? Should teaching in early stages be entirely oral, or not?

4. (a) To what extent does instruction through the medium of a foreign language (1) hamper the pupils in the acquisition of knowledge, crushing their independence and originality of thought, and instilling in them the necessity of cram as the only means of learning, (2) impose burden on the teachers and (3) tend to the impoverishment of the vernaculars?

(b) Do pupils in the vernacular middle schools as a rule acquire a better knowledge and grasp of the ordinary school subjects than those of similar age who have been instructed through the medium of English?

(c) Are the comparative paucity of suitable text-books in vernaculars, the deficiency of

vernaculars in technical nomenclature and the multiplicity of vernaculars insuperable objections to extending the use of vernaculars as a medium of instruction?

(d) Should English be introduced as a medium of instruction gradually or not, if so, at what period and in what degree should it be introduced?

(e) To what extent is it advisable to examine students in certain subjects at the end of their school career in the vernaculars? Have any experiments been made in this direction and if so to what extent have they been successful?

We feel it our bounden duty to draw

A Rajkumar
College for
Madras.

attention to the unwisdom of a scheme, which is just being matured in the Madras Presidency, for the starting of a Rajkumar College. The separation of the sons of the aristocracy from the other children of the soil is a step fraught with only evil to the former. Nothing is more conducive to the interests of true education than freedom of social intercourse with all grades of life in the country and the prospective Zemindar will be a poor specimen of what he ought to be, in relation to his tenants and to the country, if he is brought up in an artificial hot-house like the one a Rajkumar College is bound to be. It is highly desirable that the landed aristocrats should be even in greater touch with the new impulses of the land, than the ordinary populace, for by virtue of their position, they are eminently fit to become leaders of public life. The position of advantage which the English landed aristocracy are occupying in the English

public life of to-day is undoubtedly due to their growth in surroundings less cramping than those obtaining in Rajkumar Colleges. The lamentable failure of the present Rajkumar Colleges in India has been dwelt upon at length on more than one occasion in these pages, and we hope one more will not be added to the list, not at least with the money of the tax-payer in Southern India who is well-known for his grinding poverty.

We invite the attention of our readers to a valuable contribution by Mr. Chamupati Rai, B.A., Bahawalpur State, Punjab, appearing elsewhere, describing the Gurukula at Multan. It is a pity that no elaborate and authentic accounts should be available of the educational institutions of our ancestors, but the

Ordinances of Manu point to a very strenuous and high educational ideal. Among institutions in India to-day in which those principles are embodied is the *Gurukula* and we are glad to be able to furnish our readers with a vivid description of the details of its daily life. It is interesting to note that in several important points even the West to-day has been pleading for a more strenuous ideal in education, resembling that of the spirit in the code of the Hindu Law-giver. The whole series of *Duty and Discipline* pamphlets now being issued by the *Duty and Discipline League* in England furnishes an interesting com-

portant truths relating to education, worthy of constant repetition. Teaching was a difficult art, it was no trick or dodge, it was the expression of the whole character and intellect. His first advice to young teachers was that they should be natural. In the second place, anybody in the teaching profession should cultivate a high sense of enjoyment; nobody could teach well in low spirits. A temptation of the profession was to overwork. Professor Jowett had declared that over-

work was stupidity. Keeping in good health was another necessity. Next he advised the cultivation of the divine gift of curiosity and the stimulation of the exercise of the gift by young pupils. It was the art of a good teacher to realise and develop the powers whether latent or articulate of the little children to be taught. There was a tendency to under-rate the great imaginative powers of children.

THE MADRAS UNIVERSITY.

By AN EMINENT EDUCATIONIST.

Special interest attached itself to the last meeting of the Senate of the Madras University, in view of the momentous questions that were raised by the agenda. Mr. G. A. Natesan demanded that no more money should be spent on University Professorships but arrangements should be made to depute graduates of the University to foreign countries with a view to train them for University Professorships. We confess we are not proud of this demand for an effeminate dependence on foreign Universities for all time. We feel that the time has come for taking a bold stand in the matter and declaring that no brand of inferiority shall be set upon even the best products of our Universities, irrespective of individual merit and experience. This tacit assumption that the graduate of a foreign University is necessarily superior to those

of Indian Universities, unfortunately shared in even by some of our own countrymen, must vanish if our Universities should progress. Otherwise, the Universities may as well be closed and no attempt be made to improve their efficiency. In all seriousness, we ask, when shall the Indian Universities be expected to have arrived at a standard of efficiency, when their degrees shall be regarded as equal to those of foreign Universities? We are glad to see that the Senate has passed the propositions: "That in the opinion of this University the recommendation of the Public Services Commission that in the interest of education, the creation of Research Professoriates is necessary and desirable, deserves to be given effect to" and "that having regard to the circumstances of University education in the country and the steps already taken in this regard at the older Universities, it is eminently desirable that this body of Professors should be attached to the Universities."

The Educational Review

A Monthly Record for India.

VOL. XXIII.

SEPTEMBER 1917.

No. 9.

All literary contributions, books for reviews, newspapers or magazines, sent in exchange, &c., should be addressed to the Editor, No. 4, Mount Road, Madras. Articles and communications intended for publication in the succeeding issue should, as far as possible, reach the Editor not later than the 20th of the month. The Editor solicits contributions on all subjects of educational interest. Stamps should accompany the MS., if the writer wishes it returned, in case of non-acceptance. The Editor can in no case hold himself responsible for accidental loss.

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AURANGZEB AND THE MAHRATTAS.*

IT is a standing mystery of the philosophy of history that some of the most famous events are oftentimes based on insufficient data of doubtful accuracy. No even's are better known than the Laughing Wall, the Well of Babel, and the Water of Life or Elixir, but it is highly doubtful whether any of these have got the least trace of truth about them.

It is probable that certain things happen to come widely in repute owing to some temporary cause, and afterwards, with the lapse of time, the root-cause of their fame being lost sight of, their world-wide reputation itself serves as a guarantee for their truth. This phenomenon is very much helped by the habit of imitation inherent in man. Hence, in after-ages, nobody cares to criticize their veracity or minds to sift the matter, till at last they are universally admitted to be true.

Take for instance, the destruction of the famous Library at Alexandria. Some frivolous or malicious Christian Crusader fabricated the lie

* Freely rendered from the Urdu brochure of the late Maulvi Shibli.

that the Caliph Omar ordered it to be burnt down. In those days, the Crusades were being fought and Christians were putting their imagination to the rack for concocting plans calculated to throw a slur upon the Moslems. When this egregious lie came to be known, everybody believed in it, as if it were the word of God. Everybody talked of it, till it came to be admitted as proverbially true, but the Tribunal of the Search after Truth has at last given the verdict that this imputation against the Caliph Omar is nothing more than a foul myth!

The evil reputation of Aurangzeb is just like the case cited above. His very orthodoxy and strict attachment to the tenets of his religion have been interpreted in a false light. The most naked truths have been perverted, till at last through the joint efforts of the perverse historians and the ignorant foes of Aurangzeb, a hundred thousand blames are laid at his door, so that to the posterity he is only known as the murderer of his father, the slaughterer of his brothers, the persecutor of the Hindus, the annihilator of the Moslem States of the Deccan and as the man who brought about the ruin of the

Moghul Empire, by becoming hostile to the Mahrattas.

In the present paper we mean to take up the last charge only and try to set down the facts in an impartial and unprejudiced way. Aurangzeb's animosity with the Mahrattas has been subdivided into several headings each of which incriminates him more or less. The several sub-charges usually imputed to Aurangzeb are the following:—

(1) The rebellion of the Mahrattas was caused by Aurangzeb himself.

(2) When Sivaji came over to the court of Aurangzeb the latter maltreated him in such a way as to drive him to revolt. On the other hand had he been treated properly, he would have owned Aurangzeb as his lord.

(3) Aurangzeb had called Sivaji with a promise of amnesty, but not true to his word, Aurangzeb kept him as a State prisoner.

(4) Aurangzeb did not behave properly towards the descendants of Sivaji.

(5) Having driven the Mahrattas to rebellion, Aurangzeb could not reduce them to subjection. Now it is alleged that since the Mahrattas are a prime factor in the downfall of the Moghul Empire in India, Aurangzeb ought to be held as the real cause of the overthrow of the Moghul dominion in India.

Before settling these points, a brief account of the early history of Sivaji's family will be of much use in helping us to decide about these debatable questions.

The family of Sivaji belongs to the same stock as that of the Maharaja of Odeypur. Owing to certain reasons, one member of the family, *Sorseen* by name, left Chitor and settled in the Deccan. Afterwards a descendant of his, Maloji, again migrated to Elora near Daulatabad.

At this time Daulatabad belonged to the Nizam Shahi State and the governor of it was one

Lakhi Jadu. Maloji took service under this Lakhi Jadu. Since Maloji had, somehow or other, a high regard for Shah Sharif Sahib (whose tomb is in Ahmadnagar) he named both his sons Shah Ji and Sharaf Ji after Shah Sharif Sahib. *Shah Ji* afterwards was known as *Sahuji* and this very *Sahuji* is the father of Sivaji.

Sahuji got a footing in the court of the Nizam Shahi State. In the year of the Hijra 1030, when the army of Nizam Shah devastated Malwa, and Jehangir sent his army there, *Sahuji* and his father-in-law *Jadu Rae* were among the officers of Nizam Shah's army.

When Jehangir sent Shahjehan to the Deccan for chastising the rebels, *Jadu Rae* presented himself to Shahjehan who made him *Panjhazari* (an officer of five thousand soldiers—a high rank in the Moghul army). But in 1040 A. H. he again went over to Nizam Shah and the latter sentenced him to death. For this reason, *Sahuji* came over to the court of Shahjehan and was made *Panjhazari*. Shahjehan had also given to *Sahuji* some tracts of land in Nizam Shah's State from the confiscated property of 'Anbar. But in 1041 A. H. Fateh Khan, son of 'Anbar, came over to Shahjehan from the court of Nizam Shah, and Shahjehan gave back to him his lands which were in the possession of *Sahuji*. Thus exasperated, *Sahuji* joined Adil Shah of Bijapur, and proceeded to Daulatabad with a large army.

Shahjehan sent his army under Aurangzeb in 1044 A. H. for the proper chastisement of *Sahuji*. (*Sahuji* had also placed on the throne of the Nizam Shahi State a poor boy as the successor of Nizam Shah, when the latter was imprisoned by Shahjehan). Irritated by these and other impudences, Shahjehan determined to put an end to all these troubles. Consequently in the year 1045 A. H., he subdued 25 forts of *Sahuji* and expelled him from the territory of Nizam Shah.

Sahuji now secured employment in the court of Adil Shah, who gave him Poona and Gopa by

way of reward. *Sivaji* had now grown up to manhood. Hence he took the management of these districts in his own hands. He began to construct forts at different places and gathered an army of fifteen thousand men. Adil Shah fell ill at this time, and since there was great mismanagement in the court, *Sivaji* was able to get hold of the whole territory of Kokan that was under Adil Shah. Having gained strength in this way, *Sivaji* began to plunder prosperous towns and cities in this neighbourhood. When the governor of any district tyrannised by *Sivaji*, filed a complaint in the court of Adil Shah, *Sivaji* also simultaneously sent in an application stating that the revenue of that district could be very much increased, and that he was ready to take that district under him under the condition of increasing its revenue. Since Adil Shah was unwell, bribery secured the grant of all such districts for *Sivaji* from the corrupted officials. In the meantime, Adil Shah died in 1066 A. H., and as he had no issue, the courtiers set on the throne a boy of suspicious descent who is known in history as Ali Adil Shah. When Shahjehan came to know of it, he wrote to Aurangzeb to besiege Bijapur. Aurangzeb besieged Bijapur and Ali Adil Shah was forced to offer a present of ten million rupees.

During this interval, Shahjehan fell ill, and great confusion was caused by the abortive attempts of all his sons to snatch the throne. Thus Aurangzeb had to give up the siege. *Sivaji* utilised this occasion to its fullest, built forty fortresses, gathered a large Mahratta army and began to annex most of the districts of Bijapur. When Ali Adil Shah reached his years of discretion, he sent his Commander-in-Chief Afzal Khan for the extermination of *Sivaji*. The former besieged *Sivaji* and reduced him to his last resources. The remaining story of the heinous fraud of *Sivaji* is well-known.

Not content with killing Afzal Khan fraudulently, *Sivaji* began to make raids in the territory

of Aurangzeb. Although Aurangzeb was not yet free from domestic troubles, still in the third year of his reign in 1070 A. H., he sent Shaista Khan to the Deccan for suppressing this revolt. Shaista Khan took all the fortresses of *Sivaji*, one after another, and at last, making his headquarters at Poona, he sent his soldiers in pursuit of *Sivaji* on all sides. *Sivaji* was now wandering in the hilly districts, but in 1073 A. H. he made a night attack on Shaista Khan, who was made to give over charge to Prince Muizzam, because of his (Shaista Khan's) carelessness.

Sivaji now assumed different tactics. He began to plunder the ships of the pilgrims to Mecca. Aurangzeb thereupon sent Maharaja Jai Singh and Daler Khan for his chastisement. They plundered all the districts of *Sivaji*, and again reduced him to his last resources. He begged for pardon but Raja Jai Singh had no faith in *Sivaji's* words because of his cunning and fraudulent nature. Finally the Raja ordered his army to attack the fort of Porandhar which sheltered the family of *Sivaji*. Thus reduced to a corner, *Sivaji* came out of the fort unarmed and unattended and sent a few Brahmans to Raja Jai Singh to convince the Raja of his (*Sivaji's*) submission. When the Raja was satisfied that *Sivaji* was coming submissively, he allowed him to come to his camp, but took every precaution to see that he had not got any weapons concealed about his person. At the intercession of Raja Jai Singh, Aurangzeb pardoned *Sivaji*, and made his son Sambhaji *Panjhazari*. *Sivaji* now gave over the keys of 23 of his forts out of a total of 25.

In 1076 A. H. *Sivaji* set out for Agra. When he approached the city, Aurangzeb sent Ram Singh, son of Raja Jai Singh, and Mukhlis Khan to receive him. Reaching the court, he bowed to the king and offered his present. Aurangzeb pointed to him to take a seat in the row of the *Panjhazari* officers. But *Sivaji's* expectations

had far surpassed his reception. He complained of it before Ram Singh in a corner, and feigning a pain in his stomach, lay down on the floor. Aurangzeb ordered him to go to his resting-place.

In the opinion of the European historians, the first item in the long list of mistakes and rash acts committed by Aurangzeb begins from this place. Elphinstone writes very strongly on this point, but his views are not impartial. Some European writers, besides imputing to Aurangzeb that he disgraced Sivaji, go the length of saying that Aurangzeb actually imprisoned Sivaji.

The following are the points *at issue* in connection with this point:—

- (1) Was the reception accorded to Sivaji meant to disgrace him?
- (2) Was he imprisoned?
- (3) Had Sivaji been treated better, would he have submitted for ever?
- (4) Who is the more reliable authority on this point—European or Muhammadan historians?

All the historians admit that Ram Singh and Mukhlis Khan were sent to receive Siva. The rank awarded to Sivaji was Panjhzari. Mr. Elphinstone puts it as a third class rank but it is to be regretted that the worthy historian ignores the fact that up to this time such a great man as Raja Jai Singh was also Panjhzari. He (Raja Jai Singh) was made Hafthazari by way of reward for his great victory over Siva. The Prime Minister, Fazil Khan, again, was Panjhzari.

Again although Sivaji was coming to Agra in the capacity of a conquered enemy, yet Aurangzeb sent two of his great courtiers to receive him, and gave him a place in the row of Panjhzari officials which was the rank of Raja Jai Singh. What could Sivaji expect more than this? What! should the Emperor of India have

stepped down from his august throne to receive a vanquished robber?

Another important question which presents itself at this stage is this: what was the recommendation which Raja Jai Singh had made in favour of Sivaji, and on the support of which, Siva consented to go to the court? Did Aurangzeb accept this recommendation or not? Were the hopes which had been roused in Sivaji's mind by Raja Jai Singh's recommendation, fulfilled by Aurangzeb or not?

All the contemporary historians agree upon this point that when Siva came back displeased from the court, Aurangzeb ordered that full information should be given to Raja Jai Singh and steps should be taken in accordance with his reply. The reply sent by Raja Jai Singh was only this much that Sivaji's fault should be forgiven. Upon this, the sentinel (Kotwal) who was ordered to keep an eye upon Sivaji, was removed from this duty.

Khafi Khan objects that Sivaji should have been given a higher rank than that of his son, Sambhaji. This was against the traditions of the courts of the Moghul Emperors. It was often seen that a son and a father had the same rank. Moreover a higher grade than Panjhzari could not be given to anybody at his very first visit to the court. The higher grades had always been reached slowly and by promotion. This general rule could not be broken for Sivaji.

Again the assertion made by certain European historians that had Sivaji been treated better, he would have submitted for the rest of his life, is in direct contradiction to historical truths. Is there any event in the life of Sivaji when he kept his pledged word? Can anybody reasonably accept any such thing from the vile murderer of Afzal Khan, and from the treacherous creature who plundered cities and towns unawares with motives not higher than the satisfaction of his greed or his insatiable thirst for lucre and power?

From the foregoing account we have settled it once for all and with the clear evidence of true history, that it was not Aurangzeb who drove the Mahrattas to revolt, but that in the reign of Shahjehan, the Mahrattas had grown so turbulent that he had to go to the Deccan himself for subduing them; that the army of Aurangzeb reduced Sivaji to such extremes of powerlessness that he presented himself before Raja Jai Singh unarmed and unattended and that the reception, which Aurangzeb accorded to Sivaji, was not in any way derogatory to his dignity. The points still left to be settled are these: did Sivaji gather sufficient strength to remain on inimical terms with Aurangzeb to the end of his (Siva's) life so that the descendants of Siva were able to upset the whole empire of Aurangzeb?

All the European historians have written that Aurangzeb was so far pressed by the attacks of the Mahrattas, that he agreed to give up to them a fourth of the revenue of the six provinces of the Deccan. Elphinstone hesitates to mention this question, but nevertheless he writes that through the instrumentality of Raja Jaswant Singh and Prince Muizzam, Sivaji was able to strike peace on such terms as were quite beyond his expectations. Accordingly, a greater portion of his territory was given back to him, some land was also given to him in Berar, his title as a Raja was recognised and all his faults were connived at.

We now propose to show the perversion and distortion of facts with which European historians have disguised the true facts in this case. The fact is that when Siva fled to the Deccan, and in the tenth year of the reign of Aurangzeb, Prince Muizzam was appointed joint commander of the forces with Raja Jaswant Singh, Siva sent word to Jaswant Singh that he (Siva) was sending his son Sambhaji and that he (Sambhaji) should be given some post in the army. Jaswant Singh accepted his request. Accordingly when

Sambhaji saw Prince Muizzam, he gave him (Sambhaji) the rank of Panjhzari (a rank with which he had already been endowed from the court of Aurangzeb) as well as some jaghir in Berar. This is the statement given in Maasir-ul-Umara, Vol. II, p. 348, and these are the facts from which Elphinstone has coined his account. Sambhaji was given the title of a Raja but Elphinstone attributes it to Sivaji. The grant of land to Sambhaji was an ordinary thing since all the officials had such grants. Elphinstone colours it in quite a different way. He says that the territory of Sivaji was given back to him, as if Aurangzeb admitted him to be the rightful lord of his territory.

As for the *chauth* (a tax of one-fourth of the produce) it was a rule in the Deccan that instead of the present Tahsildars and Collectors, there were Desmukhs who collected the revenue, and got a tenth or so of the total revenue by way of remuneration. In the first place there is not an iota of truth in the statement that Aurangzeb gave the *chauth* to Sivaji and his descendants. Secondly if it be admitted that it was not so and that Aurangzeb had actually granted a fourth of the revenue of the Deccan to the Mahrattas, it was done in the capacity of a king dealing with his subjects and not as European historians put it that Aurangzeb was pressed by the Mahrattas and consequently consented to pay them this sum by way of a tax.

Thus the *chauth*-question is a mere fable. But it does not settle the real point; it can be urged by anybody that although Aurangzeb might not have consented to give any sum to the Mahrattas, the Mahrattas had sapped the very foundations of the empire. Elphinstone writes:

"The more the Mahrattas came near and near to the forces of Aurangzeb, the more was he involved in troubles. So far so that sometimes they came on in their plundering career quite

near Aurangzeb's forces (cut off the provisions) and took away the cattle by force. They had so narrowly surrounded the king's forces that no body could dare walk singly out of the limits of the Cantonment without a strong guard of soldiers. The last military act of Aurangzeb was to plunder Ahmadnagar.....The king's army was always afraid of a general attack from the Mahrattas, which would lead to their (king's forces) utter ruin."

In order to settle these points, a brief history of Sivaji and his descendants should be kept in view in this connection.

When Sivaji reached the Deccan, he began to plunder the king's territory with the help of the Golkanda State. From time to time Aurangzeb sent his forces to chastise Siva. At last Siva died in the 23rd year of Aurangzeb's reign. Sambhaji succeeded Sivaji and all on a sudden he attacked Burhanpur, plundered it very mercilessly and then set the city on fire. The Maulvies of this city sent in a petition to the king that since this part of the country is so frequently infested with wars, the Juma (Friday) prayers are not permissible here. So far Aurangzeb had not paid much attention to the depredations of the Mahrattas, but he was much touched by this petition, consequently he himself went to the Deccan in the 25th year of his reign. Reaching Aurangabad he sent Prince Muizzam for the extermination of the Mahrattas. The Prince conquered everything which came in his way, but owing to the unhealthy climate of the country, thousands of his soldiers died and the king called him back. Since Sambhaji had powerful allies in the kings of Bijapur and Haidarabad, Aurangzeb turned his attention from the Mahrattas, and conquering Haidarabad annexed it to his own territory.

After this, in the 34th year of his reign, Aurangzeb sent Muqarrab Khan for the subjugation of Sambha. Muqarrab Khan valiantly

captured Sambhaji and his family. As Sambha was a cruel tyrant and not only the Moslems but the Hindus alike were disgusted with his plundering habits, the news of his capture was welcomed with much pleasure. Khafi Khan writes that women of noble families came out of their houses to enjoy the capture of this merciless plunderer.

At last Sambha was taken to the court of Aurangzeb, where he foully abused Aurangzeb in the presence of the whole court and the king himself. Aurangzeb ordered his tongue to be cut and afterwards sentenced him to death. At this stage, it should be kept in mind that during the whole course of Aurangzeb's reign which extended over fifty years, this is an exceptional case which has got no other parallel, since Aurangzeb never punished anybody so brutally as he did Sambhaji.

Aurangzeb treated Sambha's son Sahu and his mother very magnanimously and generously. Sahu, who was only some seven or eight years old was made a Hafthazari and his camp was always near the king's. Undoubtedly this was an act of unparalleled generosity, but it was surely a short-sighted policy. Truly has Khafi Khan said that it was like killing the serpent and nurturing its young ones.

The Hindus do not take any cooked meal while they are in the prison. For this reason Sahu lived on fruits and sweetmeats only. When Aurangzeb came to know of it, he sent word to Hamiduddin to tell Sahu that he was not a prisoner but that he was in his own house and that he should hence eat his food without any ceremony.

The adversaries of Aurangzeb call him a narrow-minded bigot, but if this is an act of bigotry, thousands of unprejudiced acts ought to be sacrificed over it! To the end of his life, Aurangzeb treated Sahu kindly and generously.

Accordingly, although Sahu rebelled after Aurangzeb's death, yet such a deep impression had the kindness of Aurangzeb made upon his mind that his first act was to pay a visit to the mausoleum of Aurangzeb.

After the death of Sambha, his brother Ram Raja succeeded him, and defeated the royal army on various occasions. Two of his great military chiefs were Santa and Dhanta who regularly plundered the country with forces of about ten to twelve thousand men. The enemies of Aurangzeb have described this fact in a variety of ways. But, at any rate, Santa was killed in 1106 A. H., and Ram Raja died in 1110 A. H. His wife Tarabai led the Mahratta forces after the death of Ram Raja, and like her husband harassed the Moghul king for a long time.

Now then Aurangzeb determined to exterminate the Mahrattas once for all. In order to effect this, the very first requisite was to subjugate such of their fortresses at least which were their strongholds. It was not an easy task to conquer these forts since they were situated on extremely inaccessible places. Aurangzeb was now 82 years old but still he took the command of the forces in his own hand and at last conquered all the forts one by one. In the 49th year of his reign, Aurangzeb proclaimed it in the land that the country was now at rest and that the people should now come back to their homesteads.

The Mahrattas had now been utterly ruined. They, therefore, led a career of robbers and freebooters, and made plundering excursions in the country. And this is not at all strange since the conquest of a new country is always followed by such confusion. The conquest of Burma and of the Pindaris in India by the British Government afford striking parallels.

But it is to be regretted that with the bandage of prejudice on their eyes some of the European historians have depicted these raids in quite an undesirable way. They liken the Moghul empire

to a dead carcass pecked at by the Mahrattas from all sides.

A quotation given above from Elphinstone shows how strong the Mahrattas were and to what dire straits they had driven Aurangzeb. But the attributes of the Mahrattas, their pillaging habits, and plundering expeditions indicate them to be nothing more than robbers and freebooters. Even in these days the Frontier nations always harass the British Government. Then does it follow from this that the British Government is weak and the Frontier nations strong?

Another fact which ought always to be clearly understood is that a great nation or a powerful kingdom cannot be annihilated all on a sudden. Baber defeated the Maharana of Odeypur, but Akbar found him as strong as ever. Likewise Akbar defeated the Maharana, had made him flee from his State, but in the time of Jehangir, again, the State of Odeypur was as powerful as ever. Jehangir sent Shahjehan to subjugate him and at last Kirn came to the court of Jehangir and bowed to him. But in the reign of Shahjehan, the Maharana of Odeypur again raised the standard of revolt. It was through the continued attacks of Aurangzeb that Odeypur was finally reduced to subjection.

Similarly the Mahrattas had gained strength in the reign of Shahjehan, had spread from the Deccan to Madras, and had built several impregnable forte. Besides all these facts, they were a new nation in the prime of their youth. It was at this time that Aurangzeb encountered them with the result that Siva died after yielding and acknowledging Aurangzeb as his suzerain lord. Sambha was killed, Ram Raja died wandering in the deserts, Sunka too was killed and at last, one by one, all the rebels were vanquished, all their strongholds were taken, and the country was at rest from the Deccan to Madras.

And now the Mahrattas were no longer a nation nor had they any kingdom of theirs

now they were at best robbers and dacoits who lived by plunder. Shortly after this, Aurangzeb died. The task of extirpating the remaining malefactors therefore devolved upon his successors. But as ill-luck would have it, the Moghul throne was occupied by Muizzam Shah and the cruel and unfeeling historians have put down the faults of his unworthy successors at the door of

Aurangzeb Is it not a deed of glaring injustice? And matters have gone from bad to worse at such an accelerated pace now-a-days that even a silly schoolboy with his primer of history in hand is bold enough to find fault with that august Emperor of India.

F. D. MURAD.

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THE MARCH OF EDUCATION IN THE WEST.*

EDUCATION in the West, as we find it to-day, is a growth of centuries. In fact, it will not be going much beyond the mark if we say

Education, a form of Evolution, that education is the highest form of evolution yet attained in the intellectual world. We

talk of "New Education." But we should remember that the very expression presupposes some sort of old education—that the education of to-day is a product evolved out of the systems that were devised from time to time in days gone-by. "Old order changeth, yielding place to new." With a truly prophetic vision the poet sang of the mutability of mundane things. Paradoxical as it may appear to us, a new settlement unsettles things that existed in the past. So, a student of the growth and progress of education cannot do without studying the past. Unless he reviews education as it was, he fails to take in the true significance of education as it is. He should, therefore, trace how the present settlement outlined in the programme of the modern educationist has unsettled the past which considered itself secure in its now demolished stronghold. He should examine how Aristotle, the giant, the undisputed autocrat of early and mediæval human intellect was gradually, slowly but surely, banished from his possessions by that pigmy stranger, unfettered Reason. He should, in short, watch how the world forces combined to "ring out the old and ring in the new."

To begin with then, ancient European thought was moulded by Greece and Rome for centuries. Mistresses of lands and seas, they had their short-but-at-the-time glorious career of educating early civilized Europe. Review of the past. (a) Early Greek education aimed at the perfection of the body in beauty and strength, and the perfection of the soul

Review of the past. (a) Early Greek education aimed at the perfection of the body in beauty and strength, and the perfection of the soul

* A paper read at a Conference of Teachers held at Krishnagar in February, 1917, with Mr. R.N. Gilchrist, M.A., Principal, Krishnagar College, in the chair.

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in intellectual and moral virtues." Physical education through athletics and gymnastics, æsthetic education through music and the fine arts, intellectual and moral education through the society of elderly people, through the unwritten code of national honour and morality, through religious hymns, war-songs and legendary tales of heroism comprised the Greek programme. Schools, too, were not wanting to teach certain specific subjects. Mr. Raymont doubts how far the items included in the programme of the new educationist can justify their title to any novelty inasmuch as most of the reforms advocated therein are as old as Plato's Republic. But it should be noted that Spartan education was military in its character. The exigencies of the State demanded the production of a "hardy spirit in a hardy body." Sparta therefore ignored literary education. Refined Athens, on the other hand, differed with her somewhat masculine sister and voted for humanistic and æsthetic education for a life of culture. Beauty she valued most, and the realization of beauty was her ideal. Both Sparta and Athens ignored History and Science, and agreed, in their narrowness, to confine education to the few and deny it to the masses. In Rome we find a somewhat different state of things. A pre-eminently practical people, the early Romans

cared little for culture and knowledge. Citizenship and a military career induced the Roman youth to submit to a course of physical and moral training. The State did little for the intellectual advancement of the people. Schoolmasters had a very low status and the place of female education was left blank. Later, Roman education attempted to mould the orator, and could not conceive of a broad-based, catholic, universal system of education. In spite of Plato and Aristotle, in spite of the Institutes of the Rhetorician Quintillion, this narrow education as conceived by the ancient Greeks and Romans was

weighed and found wanting, though the classics of Cicero and Demosthenes will live to the end of time.

With the advent and spread of Christianity dawned the era of Mediæval education in Europe. While the Greeks and the Romans aimed at forming the warrior and the orator, and dealt out their education in miserly doles, Mediæval Europe through the influence of Christianity preached "the universal brotherhood of man under the universal fatherhood of God" and gave to women an equal rank with men, pulling down the barrier between the classes and the masses. The worth of individual and personal freedom was recognized. Formerly the individual existed for the State; but Christianity subordinated him to the State in so far as his secular interests were concerned, his spiritual concerns being placed entirely in the custody of the Church. We find the spiritual and moral sides of human nature emphasised and intellectual education considered essential as a means of spiritual development. The Bible could not be read and understood without a knowledge of the Latin tongue. Thus learning received a great impetus.

But here also we find very little of science and mass education. The vernacular was in a very sad plight, and secular education could make little headway through mysticism, occultism and religious fanaticism. Satan held the body in "fee simple"—it was a seat of sins and an enemy of the soul. The training of the body was therefore to be discouraged. Original thinking was nowhere, and words were exalted over things. When Islamism spread, large portions of Europe came under the Moslem sway, and through the Arabs the knowledge and culture of the East found their way to the Western continent in the Middle Ages. Universities arose after the Islamic

models, but education was confined to the clergy and the high class people. Reasoning about words and ideas borrowed from books, not examining things themselves led to the neglect of science. Female education was generally ignored except among the nuns and the ladies of the knightly class. The Middle Ages, saturated with the spirit of scholastic learning, do not teach us what construction in education is, but show us indirectly at least what should be avoided.

A reaction, however, was silently setting in. This under-current flowing silently against the dry, dogmatic, scholastic learning of the Middle Ages showed itself above the surface when the capture of Constantinople by the Turks in 1453 A. D. drove classical scholars to different parts of Europe. Hitherto trained to logical analysis, the world had been disgusted with the formalities of the Trivium and the Quadrivium, and as Mr. Quick very happily puts it,—"Beauty of literature, the conception of style or finished expression came back to Europe after a thousand years of oblivion and abeyance." Greece and Rome lived again. This re-awakening of the sense of beauty in literature has been called the *Renaissance*.

By this time a growing spirit of free-thinking and independent reasoning, a spirit of doubt in the place of blind belief, leading to Martin Luther's Reformed Christianity in Germany struck the death-blow to the absolute sway of the Roman Catholic Church. Religious reformers advocated educational reforms without which no Protestant Christian could hope to secure his fitness for independent judging and thinking both in temporal and spiritual concerns. Henceforth authority made room for free enquiry. Scholasticism was supplanted by the real and inspiring studies of the classics in

original. The Renaissance education took up the development of *the whole man*, and physical training formed a conspicuous part in a system of complete education. Education was secularized and popularized; but unfortunately the learner was placed above the *doer*. Book-learning was to regenerate the world. The same neglect of the vernacular, the same neglect of science which marked education in previous ages also characterized the Renaissance period. Education was identified with classical learning.

The age of science and observation was not yet come. The intellect of reformed Europe was swayed by the literary spirit of the Renaissance for about two centuries. The Reaction started by Reformers, rival spirit, the Baconian spirit of scientific enquiry,

began to manifest itself in Europe early in the seventeenth century, but years had to elapse before the scientific spirit could unsettle the craze for ancient classical learning. A reaction was started by thinkers like Montaigne, the Jansenists, Locke and Rousseau, and it found its way into the scientific brain of the far-seeing *Verulam* who revolutionized the ideals of the Renaissance education. We have seen that education in the past meant book-learning. Montaigne first raised his voice of protest against bookishness and useless learning, and laid great stress on the practical value of education. He wanted to form a *man* and not a *specialist*. The training of the judgment, a first-hand knowledge of things from Nature, intercourse with men, travels and physical exercises—all these found a place in his scheme of education. He greatly influenced the educational conceptions of Locke and Rousseau. Locke had complete trust in the reason as the only guide to truth. He attached greater importance to training than to instruction. Like his predecessor Montaigne he more valued the *subject* (man) than the *object* (knowledge).

Rousseau was the very first to explode the Renaissance theory that man was entirely a learning animal. He denied this in strong and emphatic language. He was also the pioneer of child study.

This has made him one of the greatest reformers of education. It is not perhaps going too much, if we say that it was Rousseau who started the new education. It was he who first gave up thinking that the sole equipment of the child was that grinding machine, the memory. The child in his conception was a being who feels and reflects, acts and invents. The Baconian philosophy is the extreme type of the reaction which,

to quote Mr. Quick's language, is "a turning from fancy to facts." His philosophy had a practical end which was directed to human welfare. Unlike the theologians he did not like to lure human reason into snares and pitfalls. He led men to see for themselves, so that they might escape for good the clutches of the authority of the Church. To his analytic brain, therefore, the abstract creations of the human mind are of no use. The material universe, the laws or sequences are the only things worth studying. Patient induction and experimentation help the child gradually to ascertain the sequences.

In our enthusiasm for individual workers, however, we should not lose sight of a small band of teachers who played a conspicuous part in bringing about this reaction against the bookishness of the Renaissance learning. The Jansenists disliked tradition and relied on commonsense. They shook themselves free from formal routine work and education was made agreeable as play. The hitherto neglected mother-tongue was accorded preference over the unknown tongue of a foreign land.

We see how bookishness was being gradually replaced by the more scientific and rational

spirit. But those who started the reaction were mere *thinkers* and not constructive workers. We want workers now.

We are now passing through the transition period. We feel it. We stand on the threshold; we bid a final adieu to the twilight region of the Renaissance learning, and catch a glimpse of some of the solid workers within who will lead us to the bright, hitherto unexplored realms of education. Down the avenue leading up to the Temple of Truth stands the Philosopher-Teacher Comenius who holds the keys. In education he tries to bring out the latent capacities of child-nature. Comenius seeks the true foundation. It was he who first looked with the eyes of a practical philosopher upon the question of education. Montaigne and Bacon had promulgated theories which others had to apply. Education, as he found it at the time, could not satisfy the cravings of Comenius, and he sought for a better system by examining the laws of Nature which, in his opinion, played an equally important part in training the mind as well as the body. "Follow Nature," he would say, "in educating the child. Don't force; proceed slowly, from the whole to the parts, from simple to complex, from concrete to abstract. Protect the child from injurious influences, adapt learning to his capacity. Follow the natural order of the mind's working in training the senses, the memory and the intellect. Make learning pleasant to the child; don't repel him, but attract him." These are some of the most important reforms which Comenius advocated. It was he who first laid the foundation of a science of education, and he lives to us in his great work *Magna Didactica* which purposes to teach all men all things. Comenius can claim to be the father of modern education. A century later, we find Pestalozzi preaching universal education—and giving education its true inter-

Pestalozzi. pretation, viz., education is not putting in, not committing to memory certain dry, untested principles, but it is *drawing out*. Every human being, says Pestalozzi, is born with certain faculties which the teacher should endeavour to develop by exercise. "Encourage children's activities; supplant second-hand or 'dead' knowledge by knowledge acquired by the child's own experience." Following in his wake comes his successor Fröbel, the inspired prophet of the nineteenth century, much persecuted, little appreciated but an epoch-making genius all the same. He looks upon the child as an organism, and education promotes the development of that organism. He discovers a divine idea for every human being, and education furthers the development of his divine idea. Action is the only means of developing this idea, and therefore self-activity or "activity with a will" is the chief thing to be cared for in education. The child is not a *learner*, but a *doer* and even a *creator* from his earliest infancy. This one principle of self-activity underlies Fröbel's *Kindergarten*. The last though not the least of this long array of luminaries is that German reformer Herbart who has simply revolutionised educational theories in Europe. The aim of education is character. "A firmly-established, self-contained, moral character should be formed through the operation of an enlightened will." Pedagogy, the science of education, which has *Ethics* for its end, should be reached through *Psychology*, its means. He therefore bases education on Psychology and Ethics. Herbart may be regarded as the greatest modern exponent of the new education. Teaching he bases on the scientific principles of Psychology. He interests children in their lesson and draws out from them by means of developing interrogation and testing questions all that he seeks to impart and impress. The famous Five-step method which is now work-

ing wonders in the hands of skilful teachers will make him immortal in the history of Pedagogy. By suitable preparation of the child's mind, by presenting the subject-matter in an interesting form, by arousing the "apperceptive mass" of the children, fusing the new with the old, Herbart has presented learning in a new and agreeable aspect. It leads to true knowledge which helps the formation of right conduct.

We have caught sight of the promised land. We have reached the final stage in the evolution of education. We have seen that modern education aims not at learning, not at memorizing, but at developing through self-activity. Let us summarize and discuss some of the principles of modern education. These are: (1) Each study must be valued in proportion as it develops power; and power is developed through self-activity. (2) All instruction must be adapted to the actual taste of the pupil, and not determined by considerations of utility. (3) All methods should, therefore, have a scientific foundation, i.e., should follow the laws of the mind, or should have been tested by those laws. These are based on sound psychological principles and may be included in one general law, viz., "Follow Nature." If education really means development, the educator must try to bring out the latent capacities of the child, proper regard being paid to the laws of the mind in their various stages. This brings us to the consideration of some maxims, viz., proceed from the simple to the complex, from the known to the unknown, from the concrete to the abstract, etc. First, then, the intellect of the child who has yet to develop his brain-power can never understand the complex. It is doubtful whether the child has got the power of complex reasoning and abstract thinking. He has, therefore, no basis for the teaching of complex things. The simple appeals to him in his simplicity. Again, with the young child the 'ego' is in the ascendant. He speaks

of his own actions, his own possessions rather than those of other people. When he has acquired a certain power of thinking he begins to use the third person. He becomes gradually interested in people and things beyond himself. The known appeals to him in the first stage; he is interested in the unknown afterwards. So, if the teacher wants to make his lessons of any real interest with small children, he should proceed from the known to the unknown, or in other words, should fuse the new with the old that exists in them. Thirdly, the wise teacher should base his instruction on the well-known principle of proceeding from the concrete to the abstract. The little babe sees the mother's face and that calls forth a smile. Later on, it calls forth a hand extended, pointing to the object of love. Still later, the sight of the mother's face (a concrete object) calls out its corresponding expression "mammy." At the initial stage the babe has a name for what he sees, touches, hears and handles, but has no words for abstractions. These come from concrete things. His senses should, therefore, be trained first; his self-activity aroused. The other demands included in the programme of the modern educationist, viz., the subordination of the memory to the other faculties of the mind, nature-study, the preference of modern language and literature over the dead languages, the importance of physical education, universal education (not excluding the women), professional training for teachers are also sound, but they do not require any psychological treatment as the principles indicated above.

We cannot do better than conclude this paper by drawing an antithesis between the old and the new. Ideas regarding the education of a child are fast changing, and the methods also have changed to suit the ideas. Let us here notice where the change lies. It has been a five-fold change affecting (1) the teacher, (2) the taught, (3) the

Conclusion—antithesis between old and new.

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curriculum, (4) the methods, and (5) the aims.

As to the teacher we have seen that formerly the Church and the clergy took charge of the education of the people; now we see that the State controls education. Formerly only male teachers were tolerated; now female teachers, notably in America are liked and appointed. Formerly anybody could take up the profession of a teacher; the modern idea is that a teacher must have a thorough, scientific training in his art. As to the second change we

notice that formerly education was confined to the upper levels of society; only boys were allowed to be taught; and only persons who were normally healthy in body and mind had the privilege of education; but in modern times education is meant for all. The privilege has been extended to girls, and even the question of the co-education of the sexes is engrossing the attention of the world. The depraved, naturally deformed, unfortunate persons are not excluded, and even day-labourers and peasants enjoy the full benefit of education in the continuation schools. As regards the curriculum, we find the ancient

classics are being gradually replaced by the mother-tongue, verbal studies supplanted by naturalistic or real studies, formal and abstract subjects making way for concrete and practical ones. We see also that arrangements are made for specialization at a later stage of the child's education, and the ancient liberal studies have yielded place to arts and industries in modern times. When we come to consider the methods of teaching, we find the

following changes have crept in. The ancient Deductive method has been replaced by induction. The culture of memory is now looked upon as only of secondary importance; critical judgment and

reasoning have been accorded the place of honour. Teachers then studied *books*; now they study the *child*. Formerly knowledge was forced; now children are only given guidance. In ancient times people had only information from books; but now the mind is exercised. The empirical, didactic teaching of ancient days has been replaced by the rational and heuristic teaching of the present times. Formerly children were educated at home under a private tutor; but the practice has been discontinued and school education has got its proper place. The bad equipment and unromantic surroundings of the school-house have been supplanted by æsthetic surroundings, and last though not least, the rule of the rod is over; mild treatment and sympathy have taken its place. Finally, the aim of education has considerably changed. The ancient one-sided development of life has made

room for harmonious development. Formerly, there was preparation for a particular sort of life, but now all the sides of a young man's character are developed. Past education emphasised information; present education exercises the faculties. Formerly knowledge was quantitative; one who knew most was valued most; but now knowledge is qualitative; one who knows best is valued best. The aim of education was either theological, military, or political; but in Herbart's system of education the moral aim preponderates, and a man is educated, if he has reaped the best benefit of education, *viz.*, the formation of a firmly established moral character.

We see, therefore, that what was called learning in days gone-by was a misnomer for education. Let all the items outlined in the programme of the modern educationist be brought from the region of theory to the domain of practical politics, and we shall see that with the little ones of humane God education is not an infliction but "a joy for ever."

PANCHANAN BHATTACHARYA.

THE TEACHING OF MATHEMATICS.

IS it not an irony of fate that there should be complaints everywhere about the difficulties of students to grasp the abstract Science of Mathematics? Even the great Matthew Arnold says in his discourses that he 'ventured to say' in the 'very heart of our English Cambridge' that 'with the majority of mankind at any rate, a little of mathematics goes a long way.' When great men complain of the difficulties of its abstractions, what about our little boys who often readily say that $2 \times 3 = 8$. Every one will accept that mathematics is one of the most useful of all sciences, if not the most useful. The higher portions of physical science, on which are based our modern inventions, depend on mathematics for further development. The science of engineering, without which, I suppose, we must be content to live in our forefathers' caves and huts, is impossible without mathematics. Needless to mention here the advantages of mathematical methods of thought in the analysis of our study of various subjects.

The reason for this complaint must be one of three, or a combination of all the three, *viz.*, (1) Mathematics is so abstract that a majority of men cannot follow its abstract reasonings. (2) Our boys are too dull to grasp the subject. (3) The method of teaching is not satisfactory; and the students therefore cannot follow the teachers. We shall dispose of the reasons one by one.

As regards the first, we must admit that mathematics is an abstract science. Mr. Whitehead in his "Principles of Mathematics" states that the beauty of the science lies in its abstractness, and that it

is in this very abstractness that its students should delight. While all must concur with Mr. Whitehead on this point, one thing is certain, and that is that the mathematics of our High Schools, and the earlier years of our Colleges cannot lay claim to that abstractness which is the beauty of the science. The portions in mathematics for these classes are all very elementary and quite within the reach of even the dull brains. There are 'probably certain portions and certain kinds of problems which afford some 'intellectual gymnastics' but by no means develop the mind. And fortunately enough, it goes to the credit of our Universities that questions of this sort occur, if at all, only rarely. Thus the complaint is not due to the first cause.

The second cause is also easily disposed of. It is certainly not just to lay the blame on our innocent boys. To say that out of a class of 40 in the History Section, only 10 or 15 can pass in Elementary Mathematics in the School Final, and therefore do pass, is, to say the least of it, grossly untrue and unjust. Do we not hear that one mathematics man is more popular than a second, while a third, by himself quite capable, is never appreciated by the students? Well, what is the reason? The reason is evidently that the first man teaches well while the others do not. And if the first man is best understood and followed by all, is it not but just that more of his students should pass? Actually more do pass. Hence the reason is not the second.

Therefore the reason is the third one mainly, though probably the first and the second also partly contribute. The defect is more in the method of teaching than in the nature of the subject, or in the boys. But it

may be said, "It is quite easy to say that the defect is in the teaching. The difficulty is felt only by the actual teacher, not by any layman criticising the teaching. One can quite safely fight a lion so long as he is not out of his cage. What are the defects in the present method, and what ought to be the method?" Yes, there is no use of destructive criticism so long as we cannot suggest methods for improvement. The object of the present article is to point out certain obvious defects, and suggest methods of remedying them.

i. *Our unwieldy classes make individual attention impossible*:—Though the rules of the Educational Department require that there should not be more than forty students in one section, yet how many schools obey it? There are at least 50 in each section, often more. What is the result of this congestion? Individual attention cannot be paid to the students. When an exercise is given, and all give their note-books with the examples worked, the teacher cannot go through the note-books carefully, and cannot therefore find out who works the questions himself, and who copies from another. For the teacher is but a man. The result is obvious; all fancy that they have understood whereas in reality very few have. And the teacher proceeds with the false notion that all have understood him. The remedy is clear, *viz.*, to strictly enforce the rule.

ii. *Enough attention is not paid to mathematics note-books, and to the nature of the questions given*:—Everyone knows that students do not maintain good mathematics note-books. They are often compelled to purchase costly note-books for science, but nobody cares to see that they have neat

note-books for mathematics. It is advisable to enforce the purchase of uniform neat note-books (by all means let them be as cheap as is consistent with neatness) and the careful entry of sums in these note-books. In my opinion the cheapest is obtained by having an ordinary note-book with fairly good paper, and quarter pound card-board cover, there being a piece of black calico to cover the stitching. Without this calico the card-board cover will soon give way. The borders should of course be carefully cut. Having thus obtained a neat note-book, how to make use of it is quite easy. Let the student leave a margin of three-fourths of an inch. Let him commence his entry somewhat as follows:—

15th July 1917.

Exercises L. Longmans' Senior Arithmetic: Dexter and Garlic.

Ex. 15.

The sum is to be entered against its number in case it is dictated from outside the text-book. It should be worked out completely with full explanation. When it is worked in the class, it is but roughly and carelessly entered in the note-book. This second entry, *provided it is not mechanically made*, will impress the principle more fully on the mind of the student in addition to showing him the places where he has not perfectly understood his teacher.

As regards the nature of the questions, I need only say that the text-books are not properly prescribed. What I mean is that the text-books chosen do not contain interesting questions with at least something of the human element wherever this is possible. To make a subject interesting, it is certainly necessary to have a variety of ex-

amples. This may not be possible in some parts of Algebra and Geometry. In other parts, and in Arithmetic especially, this is quite possible. Arithmetic is mainly a subject of everyday use, and as such should contain sums bearing on the topics of everyday life. As an example, the questions in Longmans' Senior Arithmetic by Dexter and Garlic are interesting and of varied types. The book no doubt leaves many things to be desired by way of clear exposition. But the questions are quite interesting and I have always found that students take very great interest in working such sums. Questions arranged as below are quite undesirable.

Find the simple interest in the following cases:—

1. On Rs. 580 at 6% for 8 years.
2. On Rs. 340 at 7% for 4 years.

or again thus:—Find in what time—

1. Rs. 540 will amount to Rs. 800 at 6%;
2. Rs. 340 will amount to Rs. 500 at 9%.

and so on, or again:—Find the discount on the following bills—

1. Rs. 300 drawn on 1st October at 6 months and discounted on November 14.
2. Rs. 457 drawn on 4th June at 3 months and discounted on July 19 and so on.

I refrain from naming the book to which I am referring, for I have reason to believe that some schools use it as a text-book. But I am sure my readers will very easily find it out, and avoid it if they concur with me. Sums arranged in this manner may be quite easy and direct; but I think no student who has got any intellect in him will work more than three such sums. Moreover the test of a good sum in Arithmetic is not its simplicity or its directness, but its practical bearing on life. The remedy is to choose a good text-book.

3. *The status of a teacher is not high enough to attract the best men*:—It must be admitted

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on all hands that the best of our intellects do not enter the Educational Department from which it necessarily follows that our teachers are not experts in the subjects which they teach. They have often to go through an elaborate course of preparation at home (those, who are not willing to prepare, prescribe generally a book of the sort above described); and the result is that often they do not clearly understand the portions they teach, much less can they make the students understand. If they meet with any intricate point, which they cannot solve immediately, they often postpone its solution and stealthily lead the students lightly over the intricate point. When students encounter any such intricate points in the examination, they dodge, and write all sorts of nonsense as proofs for theorems in Geometry. The remedy is obvious, *viz.*, to attract the best men by offering good prospects.

4. *A teacher in schools is often overworked*:—A conscientious teacher has little time at his disposal. He has often to work for four hours and more during the day, and goes home quite jaded at 5 p.m. Then too he does not go out into the open air in search of recreation, but takes a walk at the most, a *very vigorous sort of exercise indeed!* He returns from his walk, takes his meals and goes to bed. The next morning, when we can expect him to make his preparations well, his attention is diverted by his family anxieties and so even then he makes little preparation. He naturally prescribes a book of the above sort. Often teachers bestow what attention they can on the examination-going classes. I know of teachers who, out of a book of 400 pages or more, do less than 100 pages in the IV and V Forms leaving the rest of the book to be finished in the VI. What is the result? Such a procedure in teaching necessarily keeps up the portions to

analysis in the form of a number of statements all connected with one another will be helpful. Such an analysis will be found very helpful in teaching history. Suppose a certain period in English History is completed, say the Tudor period. It will be found very easy to commit to memory the main results if an hour or two is devoted to the clear analysis of the period in some such form as the following:—(1) Kings of the period in order. (2) General characteristics of the reign of the Tudors. (3) Individual peculiarities of the kings, if any. (4) Leading events in each king's reign. (5) Any important changes in the laws which affected or moulded the further growth of the English constitution. (6) Contemporary kings in India, and a brief survey of their reigns. This method of teaching has obvious advantages which all will realise. The analysis is to be made by the teacher in the class. The students may occasionally refer to the book and state what has to be written under each head. Compare with this a man who asks the students to read history para by para, and begins to explain; or again a man who goes on lecturing all the five hours in the classroom. Which method is better?

In the case of mathematics, spend five minutes in briefly questioning on the portions done in the previous class. Then begin the new lesson reserving ten minutes at the end. During these ten minutes let the students analyse what has been done. Let them suggest a convenient method of arranging in a logical order in the form of a number of paragraphs with corollaries under each, if any. The teacher should correct and write a neat analysis on the board. Let the students enter this analysis in their note-books against the date, and proceed with the sums. Every student cannot but understand unless he is quite unfit for the class. If this is done, I think three-fourths of the present failures in mathematics will disappear.

C. KRISHNAMACHARY.

SOME SUGGESTIONS FOR THE IMPROVEMENT OF SECONDARY EDUCATION.

THERE is so much talk about improvements in education and bettering the pay and prospects of teachers, that perhaps it may not be out of place to offer a few remarks and suggestions in the hope that some of them at least may commend themselves to the ensuing Conference of Headmasters and to departmental authorities.

4. SUGGESTIONS FOR SECURING EFFICIENT TEACHERS.

The University should permit graduates who are permanent teachers in recognised institutions to appear for additional optional groups of the B. A. degree, or for higher degrees in Arts, without insisting upon attendance in an Arts College.

The University should institute a Doctorate to be awarded to teachers of more than 20 years' standing who submit original *theses* on literary or educational topics. In their case the subjects need not be 'set' or 'prescribed' by the University. By virtue of their long experience they should be above being driven in pre-determined grooves. The institution of such a degree would not only attract scholars to the profession, but keep alive their interest in teaching methods.

The privilege of appearing for University examinations should be extended to Intermediates (I mean by the term holders of the University Intermediate diploma) and S. S. L. C. holders. Trained Intermediates and S.S.L.C.'s should be allowed to appear for the B.A. degree examination and Intermediate examination respectively, without attendance at an Arts College.

A word about secondary grade teachers' training. There is no use of clubbing together

Intermediates and S. S. L. C.'s for a common course of training unless something is previously done to raise the intellectual level of the latter.

The chief drawback about S.S.L.C. teachers in the fact that their knowledge is extremely one-sided. They have none of the versatility so necessary in teachers of the lower school. The old Matriculates are decidedly better in this respect, for they can handle any subject of the lower school curriculum with equal ease. Not so the new race. An S.S.L.C. teacher who has studied mathematics and a science subject of the C group cannot give a satisfactory lesson on a topic involving historical knowledge, e.g., Canute and his courtiers; while a 'specialist' in the History of England and a vernacular is equally at sea when called upon to handle a test tube and spirit-lamp to demonstrate the boiling of water in an elementary science lesson.

If S. S. L. C.'s are to make good teachers at all, this one-sidedness should be removed. Now that training sections are going to be attached to Secondary Schools, it would be a good thing to make the History-and-Vernacular S.S.L.C.'s attend the V and VI Form lessons in (C) Mathematics and a science subject; while the Science-and-Mathematics men may, with equal advantage, be made to attend the lessons in (C) Vernacular and the History of England and British India (*excluding the special periods fixed for detailed study*). In addition to this, some brief training in office work should also be given to S.S.L.C.'s, for a good many of them may have to serve in Incomplete Secondary Schools and have to assist the Headmaster in clerical work.

If it is not found practicable to arrange for all this during the training year, S.S.L.C.'s may, during the year preceding the training period, be attached to Secondary institutions as *apprentices*. This year of

apprenticeship may be devoted to the supplementary course in the C subjects above referred to, and to picking up in an informal way some experience of teaching and office routine, and to observing the senior teachers at work. Such a procedure would have a triple advantage:—(i) It would prepare the S.S.L.C. holders for training along with Intermediates, (ii) it would provide schools with a sort of relieving staff to do work during the temporary absence of permanent teachers, and (iii) *above all* it would be a strong incentive to the senior teachers (who are held out as models for the younger flock to follow) to keep themselves up-to-date in their ways of instruction, instead of bidding good-bye to teaching methods the moment they quit their training institutions.

Trained teachers serving in schools should be given facilities to study all the changes and new developments in education subsequent to the period of their training in order to keep themselves up-to-date. This end may be achieved in three ways:

i. By so arranging the long term of training institutions as to keep them at work for a fortnight at least after Secondary schools have closed for summer. Teachers may be sent up from various schools to spend a fortnight there in observation of new things and methods, their travelling expenses being borne in whole or in part by the management or the Government.

ii. By arranging for vacation lectures for teachers by specialists, accompanied by model lessons.

iii. By getting up educational exhibitions periodically and awarding medals and certificates for the best exhibits.

The common procedure of inviting exhibits from various schools usually brings in an extremely unwieldy collection of articles in

bewildering variety. A few may deserve reward, but the major part consists of stale rubbish specially got up for the occasion. There are very few things devised for class use, actually tried and found successful as aids to teaching. Such exhibits alone should be procured, if the undertaking is to have any educational value. How, then, are these to be got at? Through the help of Inspecting officers. These, in the course of duty, visit a number of institutions, and so can have a comparative idea of all that is best in each and deserves imitation by the rest. Only things that have come in for such special notice and mention in the Inspection reports should be taken in as exhibits,—syllabuses, apparatus, furniture, museum preparations, model note-books, in short, anything which bespeaks merit or originality on the part of pupils or teachers.

Exhibits from commercial firms should be kept out. For instance, a ready-made preparation exhibiting the metamorphosis of the frog can be got from a London firm for about a pound. But suppose a school-master also devises a similar exhibit by carefully bottling and labelling the various stages. This may lack the enamelled letters and artistic finish of the firm's exhibit, but it should be given the prize. Awarding the prize for a shop-made exhibit means a brisk sale of the article and more money to the firm; while awarding it to the teacher would stimulate a hundred others to devise means to make their teaching more graphic and interesting—certainly the better course of the two.

B. SUGGESTIONS FOR BETTERING THE STATUS AND PROSPECTS OF TEACHERS.

1. Every Secondary School should be managed by a duly constituted Managing Board but never by a single person.

2. Every school should be compelled to maintain a provident fund for the staff, as a necessary condition of recognition.

3. All permanent teachers on the staff of recognised Secondary Schools should be given, at their option, the benefit of postal insurance.

4. Every institution should educate the sons of its teachers at half the standard rates, and their daughters free.

5. For some time to come teachers should be exempt from income-tax and profession-tax.

6. No teacher who has been engaged for a working term should be discharged at the close of the working term and be denied the salary for the ensuing vacation.

7. Promotions of Assistants in the Upper school and Lower school should be strictly according to seniority in point of service. If the 1st Assistant's post falls vacant the 2nd Assistant (unless otherwise disqualified) must get it in the usual course. He should not be superseded by a raw recruit, or one grafted on from another institution.

8. No Assistant-master should be suspended, dismissed, or otherwise punished, except with the concurrence of the head of the institution and the Inspector of Schools; and no Headmaster should be suspended, dismissed or otherwise punished unless he stands condemned by the Inspector of Schools and the Director of Public Instruction.

9. Teachers should be amply paid so as to be above the temptation of undertaking private tuition, with a host of incidental evils to their schools and themselves. (*Vide infra* for standard rates).

10. To prevent all chance of heads of institutions being hauled up in law courts for misappropriation of funds, &c., every school, whether under private or public management, should submit its accounts to Government audit twice a year.

11. The teaching profession should come in for a fair share of Government honours.

12. Teachers should be placed above the influence of fear or favour locally. This is quite essential not only to raise the status of teachers in society, but also to ensure right discharge of their duty. To take an instance, if the son of an influential man of the locality, or of the Manager, or President himself, scores low marks at school, the school staff should be in a position to deny him promotion without being any the worse for having done so. For this purpose, the Assistant-masters should be answerable only to the head; and Headmasters should belong to a provincial service directly subordinate to the Director of Public Instruction, irrespective of the management to whom their services are lent, much like medical officers, and subject to transfers once in five years. They should have a seat on the Managing Committee, without the power of voting, for giving advice on educational matters. Most managing bodies stand woefully in need of such professional advice.

Such a system is worth trial at least in the case of schools managed by (i) Local Boards, (ii) Municipalities, and (iii) public trusts. It would be a near approach to those ideal conditions which, we are told, prevailed several decades ago, when all High Schools had Government Headmasters. The heads of institutions would then be (i) less susceptible to local influences, (ii) and hence less fettered in the discharge of duty.

As suggested by one of our eminent Indian educationists, Headmasters of High Schools should be given the same start as Assistant Inspectors of Schools, and Headmasters of Incomplete Secondary Schools should be started in the cadre of Sub-Assistants. The latter may be subject to intra-district

transfers, and the former to transfers all over the Presidency.

C. SUGGESTIONS FOR SAFEGUARDING THE INTERESTS OF SCHOOLS.

Everything should be done to induce Assistant teachers to serve long in the same school, and discourage shifting from school to school. This can be done (i) by assuring them that promotions would be strictly according to seniority in point of service, (ii) by bringing the same conditions of service to prevail in all schools.

Just as standard rates of fees have been fixed by the Government, so also standard rates of salary for teachers of various qualifications should be fixed and no departures allowed.

Thus:—

1. Headmaster (*vide supra*).
2. 1st Assistant.
3. Other L. T.'s.
4. Untrained graduates start only to be fixed, no grade or increments till trained.
5. Trained Intermediates.
6. Untrained Intermediates similar to 4 above.
7. Trained Matriculates and S. S. L. C. holders.
8. Untrained Matriculates similar to 4 above.
9. Senior Pundit.
10. Junior Pundit.
11. Senior Drawing Master.
12. Junior Drawing Master.
13. Senior Gymnastics Instructor.
14. Junior Gymnastics Instructor.
15. Head Clerk.
Second Clerk.
16. Laboratory attender, &c., &c.

Some schools have a provident fund, others have not. Some schools offer annual incre-

ments, others, (e.g. Board and Municipal Schools) give only biennial increments. All these items of disparity between school and school should be removed, for otherwise, some schools are placed at a disadvantage in the competition with the rest.

iii. Heads of training institutions should be applied to for trained hands. They would be in a position to gauge the relative demand and supply teachers at the standard rates of salary (above suggested) or recommend a higher start in case of scarcity.

The present system of Managers advertising in newspapers for hands is not advantageous for institutions. Managers cannot possibly have an idea of the number of hands available, and the pay they offer is not based on any data. We find one institution offering a ridiculously low salary, insulting to any self-respecting teacher, while, side by side another offers fabulously high pay making the neighbouring schools stand aghast at the competition they have to face.

iv. Every institution should provide residential accommodation for such of its pupils as do not live with parents or guardians. Boarding may also be provided, or the management may license hotels for the purpose reserving to themselves the power of occasional inspection to see that sanitary conditions prevail.

v. Any breach of inter-school courtesy (such as, the management of one school receiving directly applications from teachers in other schools, i.e., applications not submitted through the proper channel, &c.) should be promptly checked.

B. PATTABHI RAMAIA.

EDUCATION AND MUNICIPALITIES.

MOST people, even among the educated, are under a delusion when they think that the duty of a Municipality is over with the removal or decrease of the insanitary conditions of town-life caused by overcrowding and congestion. The duty of a Municipality does not stop either with the improvements in housing conditions, in the water-supply, in ventilation and lighting arrangements or in the regular cleaning of the streets and thoroughfares. Neither is it restricted to the opening of so many Elementary Schools, a High School or a College, and a hospital or infirmary with magnificent equipment. The duty of a Municipality is much more extended and onerous when one comes to notice the evils of town life and its attendant baneful effects on the physical, mental and moral forces of its inhabitants.

The cities of to-day may aptly be called the graves of to-morrow. For we find, in the natural course of things, that the inhabitants of a town or city cannot continue in might, power and intelligence for a number of generations together. The flood of humanity that rushes into a town or city, pressed by the mere struggle for existence, develops in intelligence and vigour only for a few generations and then the iron severity of the natural law of town-life begins to assert itself and the family disappears after an ephemeral period of usefulness. In the modern city or town, there is a greater expenditure of physical and mental energy than in a village, with no adequate provision to counteract the evil effects.

It is a duty that is yet to be understood and put into practice by our Municipalities that the potentialities of a town should be considerably increased so that its inhabitants

may lead a life of greater strength and vigour from generation to generation.

First and foremost, the future citizens should be so trained that they live a life that is at once healthy and in accordance with Nature. To this end greater scope should be given to Municipalities and Local Boards to open and maintain more schools and colleges in preference to private effort and to spend a greater portion of their revenue on education. It is the clear duty of the Municipality to teach the people to live sensibly and no amount of prosecution will be of any avail unless and until the people understand through education the rational mode of living. The school, in the early years, should appeal to the instinctive intelligence of children to form certain good habits. Our youths of both sexes should be taken through that form of the curriculum to the firm belief that 'Nature acts through unchangeable laws and relentlessly punishes any trespass against her code.' We must cut short the mass of material to be learnt and increase the number of hours for the study of Science and Nature Study. The number of hours for which a boy must remain confined to the four walls of his school should be reduced. It is not the cubic contents of the books and Note-book that a pupil may have that is a good criterion of true education. '*Mens sane incorpora*' is a sacred duty of mankind.

Our Municipalities must see that Secondary Schools and Colleges are situated in the environs and not in the centre. Having done so, drill and gymnastics should be made compulsory, the duration depending on the age and physique of the pupils. The physical exercises ought not to be confined to the school-going population alone but should be obligatory to

the others in the town below the age of eighteen. For, it is said by a great authority that between the ages of fourteen and eighteen, the heart and the lungs grow and develop to a maximum degree. As such this period must be utilised to the best advantage.

Every educational institution should be provided with spacious play-grounds, parks and gymnasia. The students and the people are to be freely allowed to enjoy the open air and the sunshine and appreciate the beauty of the wood and the lawn. There should be within the precincts of the town many parks and pleasure gardens for the tired eye to rest and the withered brain to refresh after a hard day's physical or mental labour.

The special attention of the local bodies must be directed to the provision in the budget for excursions by school children. Such excursions broaden the out-look of the town-child in a remarkable way. They supply new nourishment to that sense of Nature which lies dormant in the town-child. Self-restraint, mutual self-sacrifice, physical exercise and a sense of knocking about are the other things fostered by excursions for which the child will be very thankful in later life.

In addition to these, attempts should be made to teach swimming to school boys and for this purpose a number of tanks must be well-kept in the various wards of the town and instructors appointed to teach the same. It would add much to the usefulness of the parks and the tanks if there are a good many boats, so that, even adults may visit such places in their leisure and mingle freely with the boys. For, it is said that :

'Swimming is gymnastics in water. Almost the whole muscular system of the body is set

in motion, especially all the muscles concerned with bending and stretching the limbs. Strong and regular movement necessitates regular, slow and deep breathing: the chest expands to its greatest dimensions and contracts to its smallest. Thus the air which is strongly inhaled is moist, mild and free from dust and reaches to the furthest corners of the lungs. A further result is the strengthening of the abdominal and chest muscles and an increased activity of the heart and the circulation. To these we must add the benefits to the skin and the practical use of the art of swimming for all who live in the water or are employed on it: and not least its great value for the inculcation of courage, energy and self-possession.'

These proposals may seem Utopian when the question of cost and the present limitations and status of our Municipalities are considered. It is a fact that France has approached this ideal and Germany too. Then there is no reason why India should not try her utmost. The only question is 'Do our City Fathers realise this part of their duty and its importance and magnitude? and if they have the will?' As Carlyle has said 'Do thy duty that is nearest thee which thou knowest to be a duty and thy second duty will already have made itself clearer.

S. GOPALA AIYAR.

CLOUD MESSENGER.

A Critical Appreciation of Kalidasa's *Moghasandesa*

By RAO BAHADUR M. RANGACHARYA, M.A.,
late Prof. of Sanskrit, Presidency College, Madras.

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SOME STRAY THOUGHTS ON THE PLACE OF MUSIC IN EDUCATION.

I.

"And Thou
Beside me singing in the Wilderness—
And Wilderness is Paradise enow."
* * * *

I PROPOSE to put before you, dear Reader, some detached thoughts on the place of Music in a scheme of real education. I take it for granted that you are not one of those who actually make it their boast that they are never allured by the siren-songs. Nor do I suppose that you belong to the goodly company of indifferentists who, while professing to love and appreciate music, very rarely make a serious attempt to cultivate the taste. I believe you can appreciate good music wherever you find it. I presume that you are a Tamilian—for to the Tamilians I wish to refer in special—and that you deplore along with me the neglect into which the indigenous Carnatic melodies are falling and that you realise what infinite possibilities there are in them for the expression of emotions of all sorts and of all shades. Have I assumed too much?

If you agree with me so far, I am sure you will allow me to express myself in my own way.

II.

You ask me, why has music fallen into such an undeserved neglect? Listen to my story, then.

I must take you back to those days when the Frenchmen were establishing their trading centres in the east coast of the Madras Presidency. A new warehouse was opened in Karikal in the year 1 * * *, and the news quickly spread that a new band of millionaires were come to trade. I believe you know how rumour spreads and grows in

the spreading until at last it assumes gigantic proportions. My authority does not tell me in what shape it reached at last a distant village where lived a poor but accomplished piper. Suffice it for your purposes to know that he at once made up his mind to try his luck and consequently started for Karikal, a distance of * * miles. You may understand that travelling was not easy in those days, for if you find it so difficult now merely because of a shortage of wagons, you can easily imagine what it would have been when there were no wagons at all. But the piper with his troupe arrived at last in Karikal and reported himself as having come to pay his humble respects to the merchant princes. He was readily admitted, so the story says, and allowed to give a performance before the Frenchmen. I regret to say that there is no direct record extant as to how the Eastern music appealed to the Western ears, but I conclude from the amount distributed as presents that the impression must have been striking. I may remind you, in this connection, that in those good old days when paddy sold at four annas per *kalam* the purchasing power of money must have been at least eight times of what it is at present,—I mean, if my arithmetic is not at fault. And I tell you this because I want to impress upon you that a silver piece was so valuable in those days. Now comes the most interesting part of the story. The presents were produced. The boy who kept time received *five* silver pieces: the drummer *ten*: the piper *fifteen*: and the sturdy Somu who kept *sruthi*, *thirty*!

Evidently the last deserved most. Did he not keep on blowing from the beginning right to the end, while the piper but played off and on?

The moral?

That is for you to draw.

III.

"Let not the sound of shallow foppery enter
My sober house."
* * * *

I must take you, dear reader, into my confidence, for without confidence you know we cannot get on. So I must tell you what happened to me once, though the confession is bound to be humiliating to me, and I presume to you too. I was talking, rather freely, to one of my acquaintances the other day, on the subject of music. I understood him to be a cultured man who was very amiable in society and mostly amenable to reason. I may add he was a lawyer, but that is nothing to our purpose. I was pointing out to him how very few realise what a great factor music is in true education: how small is the number of men who understand the greatness of Carnatic music: how the stage with its imported and exotic music is vitiating the public taste: how the expert musician is singing songs the meaning of which neither he nor his audience understands: how the tendency is to regard Tamil as being too rugged to be set to music: how this leads to moral untruthfulness and moral cowardice: how.....: how..... I do not now remember how many more *how*'s I added, but I do remember how I finished. I quoted the well-known line:

पश्येति शिशुर्वेति वेति गानरसं कणिः

How sweet music is, is known to the beast, to the cobra and to the child.

My friend remained silent for a minute and I naturally thought that I had scored. I was even congratulating myself on having produced a deep impression upon one who was considered to be among the leaders of the local bar. But you know that ancient sayings never go wrong. You have surely heard of man proposing and God disposing. This time it was my friend from the bar who

disposed of all my learned and weighty arguments with a single question put in the coolest manner possible.

"My friend, are we not better than the beast, the cobra and the child?"

Of course, I had no answer to give.

IV.

One confession leads to another.

The scene is the master's common room of a certain High School in the * * * * * District. Time, the interval in the afternoon, when most of the Assistants are returned after lunch. A heated discussion is going on with regard to the question whether boys should be taught music in the secondary classes.

The music-master of the Kindergarten department maintains, as in duty bound, that music should be made at least an optional subject up to the Sixth Form. He looks forward to the time when like the Bachelors of Arts and the Bachelors of Science, the Bachelors of Law and the Bachelors of Engineering, there will be also Bachelors of Music, *B. M.* (with great emphasis).

An unfortunate individual suggests that *B. Mus.* will be better, since *M.* has been already utilised for "Medicine." And he is well paid for his temerity. He receives a knock-out blow in the following manner:—

"Let Medicine shift for itself. Answer me truly, which will you prefer, Music or Medicine?"

"Well served," we all cry, except, of course, the musician and his opponent.

I am not quite sure whether he stops at *B.M.* or includes *M.M.* and *D.M.* But let that pass.

There is opposed to this sturdy champion of music in boys' schools the science assistant who, by the way, can play a little on the

flute. The latter's contention is that music is fit only for girls, or as he puts it in neat alliterations, "Music un-mans men."

I unwittingly put in: "Mr. V * * * *", do you stop with the proposition that 'music is fit only for girls' or do you proceed to the converse proposition and enunciate also that 'girls are fit only for music'?" But before Mr. V * * * * can vocalise what he intends to say, the Tamil Pandit (Remember he is not of the ordinary kind!) who is trying to hold the balance even, tells him something which I do not hear. You may imagine my mortification at not getting an answer to my lawful question and you will not therefore wonder if I tell you that I instantly make up my mind not to put any question to those who do not care to reply. You will, however, come to see that I half break my resolution towards the end.

I forget to tell you that there is present also an English teacher who, while sitting on the same side and on the same bench as his science colleague, is impartially helping the opposite side with suitable arguments and illustrations drawn from Greek History. But Mr. V * * * * is not to be baffled. He rightly points out with clinching arguments that "was" is not "is": that "west" is not "east": and that a "girl" is not a "boy." How can you deny him? He proceeds, addressing his opponent:

"If I am to start a girls' school, I will gladly shake hands with you and employ you. But into a boys' school of mine you shall never enter. If I have the lead of the world, do you know what music and dancing I will teach in the latter school? The only music *shall* be the music of the test-tubes with boiling liquids and the only dancing *shall* be the dancing of negligent boys before the descending cane."

With the phrase "descending cane" comes the knell* and the various teachers depart to their classes like fleeting ghosts at the first streak of dawn.

"Oh God," cry I, with my tympanum almost torn with the tireless discourse, "Why have you created men with longer vocal chords than women's?"

Of course, I get no answer.

* * * "MARAT."

* "Knell" is the teachers' slang for the school bell.

UNIVERSITY REFORM.

(By AN EDUCATIONIST.)

ANY close observer of the development of the activities of our University since the memorable Act of Reform of Lord Curzon would be able to point out some glaring defects in the system inaugurated then. It is matter of common knowledge that the Government of India have thought of introducing some changes into the system to remove or mitigate the existing defects. The tendency of the times is reflected also in the attitude taken by H. E. the Viceroy towards the position of the vernaculars in our educational system as evinced in the frequent Conferences, official and non-official. To synchronise with this there will be the Calcutta University Commission of experts to deal primarily with matters concerning that University and secondarily with University administration in India in general. What is exactly the necessity for such Conferences and Commissions and what do they aim at?

The activities of the Senate of our University go to prove the one cardinal fact (*viz.*) that any proposal for reform of the existing defects on the part of the elected Fellows has not the least chance of being accepted by the body in the near future and some of the Senators even despair if they would be able to do any good at all. We have had meetings of protest against the slaughter of the Innocents in the Intermediate examination and several letters in the newspapers on the failure in examinations, vagaries of the examiners and similar details. But the educated community have not yet realised on the whole that examining is after all only one of the functions of the University and that concentrating too much of attention on the examinations would give an unhealthy and distorted view of the other important functions of the University. The publication of Part II of the Report of the London Univer-

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sity Commission as a booklet by the Government of India and a free supply of this report to all those concerned intimately with University administration are steps in the right direction in that it will give a proper turn to all discussions on University affairs.

The Report is a document the importance of which cannot be over-estimated. All that is contained therein is not exactly applicable to our conditions for the very simple reasons that the geographical limits of the London and the Madras Universities differ vastly and that Madras cannot stand in comparison with London either in population or in her industrial activities. The one section of the Report that strikes an educationist as thoroughly reliable and immediately applicable to our conditions is that on University administration. The University should be divided into three bodies:

(1) A small executive of seven or nine members appointed for a fairly long period and presided over by the Vice-Chancellor.

(2) The several Faculties consisting of Professors and Assistant Professors of all the Colleges who would be responsible for the courses of study, teaching and examinations.

(3) The Senate to consist of 75% of elected and 25% of nominated Fellows.

It must be observed that in this scheme adopted from the Report of the Haldane Commission the Syndicate's position is unique. It is to consist of not more than two elected Professors from the Senate and the other members elected by the Senate partly and nominated by the Chancellor, these being men of approved business capacity and administrative experience. The smaller the executive body, the more efficient its work and hence the number nine.

The Senate which is the legislative body and as such the controller of the Syndicate must be representative of the varied interests of the community at large. It need not consist merely of Professors but should be of public men who would be in a position to co-ordinate the working of the University with enlightened public opinion. The several Faculties will elect their representatives to the Senate for a fixed period and so also the arts, commerce and industries of the country. The 25% of nomination by the Vice-Chancellor should be used to correct the vagaries of election.

As regards the Faculties they are to consist of Professors of five years standing and Assistant Professors of ten years standing in the Colleges affiliated to the University. They would be able to influence the Senate through their representatives and would be in entire charge of the curricula of studies and teaching and examinations.

In a country like ours the University should never lose touch with public opinion and at the same time it should not be a place for breeding faddists. What is wanted is an elastic system which would be able to see to the necessities as they arise in as quick and efficient a manner as possible. Pure officialisation as was contemplated in the original Patna University Bill will never do, nor a Senate of Professors and teachers alone without the lay public to criticise them, would be up to the mark. The Senate should be a second Legislative Council in point of independence and public spirit, and should be thoroughly representative of the people's interests.

TEACHERS' ORGANIZATIONS.

II.

IN my previous article on the above subject published in the May number of this Review, I pointed out the necessity for forming Teachers' organizations. I shall now take up the question of their formation and functions.

It must be borne in mind that any association started for the purpose of educating the public and the Government on any subject of far-reaching interests must be fully representative of the members for whom the association exists or is intended to exist. The strength of an association varies with the area it covers, so that any final resolution coming out of it may have the support of a majority of the members after a full and thorough discussion. How often do we hear of representations by public bodies slighted and thrown off on the ground or on the pretext that they do not represent the majority of the people! Are we not aware of the Government refusing to give us the necessary reforms claimed by us at public meetings, because there exist rival associations prompted by purely selfish motives, thus causing the disintegration of an otherwise united and more fully representative body? Hence great caution is required in getting up an association which shall have the support of the people as fully as possible. A hasty gathering got up at the nick of time for considering momentous questions is certainly bound to lose the value of its opinion unless the gathering is widely represented.

More than all, questions connected with education can be settled only after long deliberations so that they might remain in force for some years still there arises a

demand for change created by a change of time. We all know how, of late, a series of experiments in the field of education has made many of our boys and girls suffer in a variety of ways and how it has, in some cases, ruined them for life. I think the cause of this is not with the Government but with those in charge of the education of the youth, who had not the united voice to inspire the Government with trust and confidence. There was not the representative association which could give the Government assistance, and which the Government might consult for advice. When everything is settled, hasty gatherings are called in here and there with a few members, and resolutions are passed condemning the system, which invariably are not taken notice of, because there was lacking the united voice of the people.

I pointed out already that an association should be fully representative, and, as such, should embrace in its fold all members from the village schoolmaster to the metropolitan college pedagogue. Every High School should have a teachers' association consisting of the members of the staff from I to VI Forms, and the Headmaster or the Superintendent of the Primary Department, who will represent the Primary School staff. It should also have as its members one representative from each of its feeder institutions. The functions of the association should be restricted to the internal management of the school, where the whole staff is to be consulted on questions such as the prescribing of text-books, the apportionment of work among teachers, the drawing-up of the time-table, details of discipline, holding of examinations, holidays and dates of closing and re-opening of the school, granting of scholarships, &c. If there are two or more High Schools in a locality, there

must be a local teachers' organization whose work will be to convene meetings at stated intervals for giving instructions in the conduct of lessons in several subjects to village and other schoolmasters to bring them in touch with the latest methods of teaching. Model lessons given by senior and experienced teachers will be the best course. These meetings should be held on dates when it would be convenient for all the village schoolmasters to be present. Occasionally one teacher will be sent out to a village to give practical model lessons to the pupils of the village schools.

These local organizations should form themselves into a District Association of Teachers, which should meet by turns at least once a quarter, in the places where there are local organizations, for the purpose of discussing the educational needs of the district and such other matters affecting the educational advancement of the district. At these meetings papers will be read by the Headmasters and senior teachers of High Schools on general educational topics and on the educational systems prevailing in other countries. The Association must have as members the Headmaster and his Senior Assistants of every High School and the graduate Headmasters of Incomplete Secondary Schools in the district.

At the top of these associations should be a central organization, which should be located in the capital city of the province and to which every District Association must be affiliated. It should meet every year at a convenient time in the several districts in turn to consider the education of the whole province, the status of the teaching profession and such other pressing educational

reforms that may be necessary from time to time. The meeting must be as large as possible consisting as members all heads of institutions possessing complete secondary schools and their senior assistants in the several subjects of the school curriculum. The opinion of this body shall be final and must be taken into consideration by the Educational authorities respecting all questions connected with education.

I could even think of an annual Educational Congress for the whole of India, but seeing the comparatively low pay of teachers, I should not venture to suggest it.

Of course, as usual, some critics might say that my sketch above is purely chimerical and can be achieved only in the land of Utopia. But I think such a kind of criticism is usually passed on every new suggestion which approaches the ideal state of things; and one need not be discouraged by such vague criticisms. A band of enthusiastic teachers inspired by true love in their own field can very successfully achieve the scheme outlined above, by going about from place to place during their spare moments and by preaching to their fellow-workers the real worth and usefulness of such institutions as these.

(To be continued)

C. RANGANATHAN.

In Active Preparation.

COLLEGE ALGEBRA

A Text-book for the Intermediate and B.A. Classes

BY

K. R. RAMASWAMI AIYANGAR, M.A., I.T.
Professor of Mathematics, College of Engineering, Madras

Srinivasa Varadachari & Co., Madras.

THE MYSTERIES OF THE B. A. CLASSES.

(Continued from page 468.)

"Moved by an inner spirit to defend the cause of truth, I write."

IT was pointed out in the previous article that the over-ambitious nature of the course of studies which the Madras University expects its B. A. students to go through in the short space of two years is the root of many a sad evil. As a remarkable instance of the tendency on the part of our University to aim at the unattainable, I shall refer to the fact that for the years 1917-1918 Walter Pater's "Renaissance" has been prescribed for the B. A. Pass course as one of the detailed text-books in connection with Nineteenth Century Prose. One wonders what secret motive prompted our educational authorities to choose Pater among the hundreds of writers of the Victorian era that have by their valuable contributions done honour to English Prose. For the purposes of a degree examination, I think it must be enough if the authors whose works are required to be studied in detail by the candidates are sufficiently representative of their age, and have a good style. De Quincey, Macaulay, Carlyle, Froude—any of these could have been chosen instead of Pater. Walter Pater, though in so far as he comes within the influence of the revival of the ornate style, and of a taste for the metaphysical writers of the seventeenth century he must be reckoned as representative of his age, is still pre-eminently unique. He is a musical writer of the very first class; and a very large number of the words he has used in his works are drawn from the language of the fine arts. We have the verdict of Mr. Saintsbury himself as to the extreme difficulty of understanding Pater. Moreover, many of the essays in the "Renaissance" are about the Italian painters and sculptors of the fifteenth century; and an acquaintance with an English translation of

XXIII

Vasari's Lives of the Italian Artists is a necessary pre-requisite of any attempt at a study of the book in question. Under the circumstances, one fails to understand the reason or reasons that may lie behind the choice of the "Renaissance" as a text for detailed study in the B. A. classes. It would be well if our University realise at an early date that the cause of true education will be most liberally served by their contenting themselves with the humble ideal of providing the B. A. Pass students with useful material for original study in English literature. To require that a candidate for a Pass degree should study in detail the ear and the eye effects of style in such a writer as Pater, and should be able to give an account of the various influences that went to form the author's peculiar manner of writing is certainly to expect too much. Yet this expectation of the impossible from students who—let confession be plain and honest—have often to contend with difficulties in respect of grammar, is a distinguishing characteristic of the Madras University. The case is much better with the Calcutta University in that it demands a knowledge of English literature and of the technicalities of style only from those that appear for its M.A. Degree examination.

I question whether it is possible for a B. A. student, with so much of other work to do, to spare time to study in all seriousness the style of Walter Pater. Is it possible for him to read at first-hand Browne, Taylor, Clarendon, Milton, Fuller, who are the originals of the author in question? Then too there is the fact that the style of Pater is but one of a thousand topics in regard to which the B.A. candidate is expected to have a detailed knowledge. It is not strange if under the circumstances he is tempted to play the part of the ready borrower, and further to economise labour by hunting after "probable questions." The position is a sad one to contemplate; but we may assure the authorities that are responsible for the higher education of

our province that so long as they consider that the form is more important than the spirit, so long as their aim is to make education pretentious and dignified, there can be no hope of remedy for the evil under consideration.

At present, the gulf that separates the English Professor from the student is an appallingly wide and deep one. A teacher of English for the B.A. classes is usually under the impression that his duty begins and ends with the delivery of certain lectures; no thought as to inspection of the work that students may happen to do in the class is so impertinent as to enter his mind. The restrictions imposed by the dictates of the Headmasters, and by the system of annual supervision by Inspectors act as powerful impulses in the way of making the High School teachers feel the necessity of seeing to it that their students really understand and follow them, and do some real and substantial work in the class. The Professor of English in a college is practically a law to himself; no such influences as the above bind him. It is possible for him to teach a class of two hundred students without getting to know even the names of one hundred and ninety of them. From any point of view, this state of circumstances cannot but be deeply deplorable. Anybody can understand the value of and the need for certain external forces that tend to imbue students with a proper sense of their responsibility, and that help to make them direct their energies in useful ways of systematic study. Under the present system, so far as English is concerned, students of the B.A. classes are at perfect liberty to follow each the method of study which suits his inclination best; for his work in that subject he is responsible only to his conscience. The half-yearly and the annual examinations are but the mere mockeries of tests. The remedy is simple; but the difficulty lies in the authorities concerned opening their eyes to the necessity of putting an end to the evil. The composition-exercises of students

ought to be corrected by Professors of English themselves instead of by tutors as at present; only in that way can the Professors have an adequate idea of the stuff of which their pupils are made. Only in that way can they be made to sympathise with the difficulties and the shortcomings of the students with whom they have to deal. Again four or five periods in the week instead of barely two as at present may be set apart for composition. When teaching the texts, the Professors ought to question the class orally with regard to important points that may arise for discussion or solution; it would be no degradation of their high avocation if they do so. On the other hand by doing so they must be enabled to form more accurate estimates of the capacities of their students than they can otherwise possibly do. Also facilities must be provided for students to have an easy access to libraries; and there must be rigorous professorial inspection of the library-work of the pupils.

But most important of all is the creation of a real love of English literature in the minds of the B.A. students. To achieve this end, the Professors must read and explain to the classes at constant intervals extracts from the great English prose-writers and poets. The pupils must be made through hard original study of first-rate literary works to build up their own knowledge of English literature instead of being compelled to gather facts or the mere shadows of facts at second and third-hand from Histories of English literature. Of what use can it be to one to know that Spenser caricatured Mary, Queen of Scotland, in the character of Duessa when one has not read even a single line of the "Fairy Queen"? What use is there in getting to know that with Skelton and Barclay and Hawes English poetry ceased to be a living force, and descended to the low levels of dull doggerel without one's possessing at the same time a knowledge of the writings of these authors? What use is there in elaborate ques-

tions regarding the history of lyric poetry being asked when the chief lyric poems of Shakespeare, Ben Jonson, Milton, Herrick, Wordsworth, Shelley, Gray, Matthew Arnold remain unread? But consider these questions chosen from the B. A. English papers of 1916.

I. "To what extent has the development of historical scholarship in the 19th century proved unfavourable to the production of historical literature properly so called?"

II. "Trace the development of English criticism either from Sydney to Addison or from Dryden to Johnson."

III. "Trace the history of the application of the metrical tests as evidence to determine the chronological order of Shakespeare's plays."

We can say with a more than ordinary degree of certainty that the motive-force which brought these questions into existence is the very negation of any honest impulse urging towards what can properly be called higher education. In my opinion, the questions to be asked at a University examination for a Pass Degree should be simple, and bearing mostly on the texts prescribed. The questions in connection with English literature ought to be of the most general type, and such that every student can have something to say about them. Surely an examiner for the B.A. Pass Degree cannot expect the candidates to have even a superficial acquaintance with Lingard, Grote, Napier, Thirlwall, and the numerous other historians of the nineteenth century. Then what is the fun of Question I being asked in a B. A. English paper? Is it that the examiner expects the candidates to have studied some literature book, and to be able to give some information about the matter? Then truly the ideal he has in view deserves all pity from those that lay any fraction of a claim to wisdom. Our University very sadly need to be reminded of the story invented by Cervantes, of the ambi-

tious frog which, in trying to increase its voluminal capacity to the dimensions of a bull, unfortunately burst itself out.

It is indeed reasonable that a candidate for a degree should study in a detailed manner two plays of Shakespeare, and a few poems of Milton. But it is not reason to trouble him with a mass of information about the comparison between the Greek stage and the Elizabethan stage. He finds it hard enough to cope with English; should he be bothered with matters Greek as well? If the University insists that a B.A. student should have some knowledge of the influence which the predecessors of Shakespeare had on him, then they should issue special instructions to the Professors of English to take the classes in a few plays of these authors too. Questions of a more difficult nature like the one relating to metrical tests may be reserved for those whose aim is to specialise in English Language and Literature. Again much that is now done in the B.A. classes in the way of English literature can well be dispensed with, and the time thus gained may be utilised for purposes of study of original works in English literature. If each student should make it a point to note down in a note-book specially reserved for the purpose his own opinions about the authors, extracts from whose works he has studied at first-hand, the help that is rendered to real knowledge must be far greater than if he should master all the Histories of English Literature in the world. If the Professors instead of dictating elaborate notes to the classes try to bring some such system as the above into force, they will be rendering a great service to the promotion of true culture.

In another article, I should like to consider one or two more aspects of the question.

C. P. KRISHNAMURTHY,

MEMORANDUM.*

I SHOULD like to begin the expression of my opinion on the best way of re-organising the Government Law School at Bombay, with a short history of the Madras Law College. The Law College here has grown out of the Law classes formerly attached to the Presidency Arts College. Till 1884, there was only one Professor; but in that year another Professor was added. The then Director of Public Instruction proposed a scheme for improving the status of legal education, by establishing a central Law College in Madras, by opening Law Classes in four of the Government Colleges in the mofussil, by the formation of a Law Institute, and by the creation of a Council of Legal Education. In the year 1888, the Government of Madras sanctioned the formation of a Law College in Madras and expressed themselves as "entirely agreeing with the opinion of the Director of Public Instruction that great changes are necessary in the present arrangements for Law instruction, before the needs of the case are fully met. The classes are too large to be effectively taught by a single teacher, and the course of instruction which the students now undergo is quite inadequate."

The great aim with which the College was founded was the promotion of the scientific study of Law. Writing in 1885, the late Mr. Justice Muthuswamy Iyer said, "the proposal for a Law College has my warmest support. Law is hitherto studied in this Presidency more as an art founded on certain arbitrary and technical rules, than as a science which consists of principles laid down for protecting

* Submitted by Mr. S. Satyamurti, B.A., B.L., Madras, on request to the Committee, appointed by the Government of Bombay, to report on the reorganisation of the Government Law School at Bombay.

human interests in various life-relations. Until lately, Law was studied even in England more as case-law than as a science. In most of the English text-books, which alone are accessible to law students in India, the division of the subject and the mode in which each branch of law is treated have reference more to the development of English Law as case-law, than as a science. A College, therefore, where legal instruction is to be imparted on a scientific basis, will be of great value to the country, and exercise a very beneficial influence on the practice of law as an art."

"The principal aim of the College should be," said Government, "to improve the instruction in the *Theory* of law, and if this object is attained, it is probable that the University will be enabled to revise and raise its standards so as to give greater prominence to scientific principles and less to practical training."

I find from the Fifth Convocation Address of the Bombay University that it was in 1866 that two students for the first time took the Degree of Bachelor of Laws. The Chancellor, in welcoming them said, "I, on a former occasion, referred to the great value of the strict and regular study of *Theoretical* law to the educated youth of India, and of the great practical importance to the country of a body of students who should add a sound theoretical knowledge of law to a good general education." And, in 1868, Sir H.W.R. Fitzgerald in his Convocation Address said, "It is a matter of congratulation, too, that large success has attended the examination in Law; because the University examination in Law is not an examination in the knowledge which qualifies a man to be a successful practitioner—it is not a knowledge of cases

and decisions and practice—it is a knowledge of the principles of law and jurisprudence; it is a knowledge of the history of law; and so, of infinite value in this country in particular."

And, in the year 1890, Rev. D. Mackichan, in his Convocation Address, referred thus to the revision of the Law Curriculum: "The old system was too much a tacit recognition of the idea that, while for a course in Arts, Engineering or Medicine, regular and systematic teaching was necessary, for the attainment of proficiency in Law, the mere keeping of terms, supplemented mainly by private reading, was a sufficient discipline. The new curriculum which has passed the Senate has sought to repudiate this idea, and to make the work of the Law School a reality by placing under the instruction of its Professors a body of young men who shall be bona-fide students of legal science. But it has become obvious to all who have given attention to the subject that the reconstruction of the means of teaching is as necessary as the turning of nominal into real students. For this purpose, a *Professoriate* which shall have time to devote to the training of these students is indispensable; a Law College, which shall be a centre of academic life to the body of its students, as the Colleges in the other faculties are to theirs. One can understand, perhaps, why an apparent extension of the average period of study is regarded in some quarters with apprehension, if it is looked upon as only introducing a time-qualification; but if the re-arrangement of the studies of our students of Law means their introduction to a course of instruction under Professors who will be in a position to discharge towards them the duties of a full Professoriate, I should expect to find the change hailed with enthu-

siasm by all who are worthy of the name of students, and who have any ambition to attain to scientific knowledge in their chosen study." I rely on this passage strongly as supporting the suggestion I am about to make. And, in 1892, the Hon'ble Mr. Justice Birdwood spoke of the new Law Course thus: "We may hope for a similar justification also of our new scheme for the Law Course which is now in full operation. We determined to give the LL.B. Degree which is a qualification for admission to the Judicial Service, only to students who had undergone a properly graduated course of study, extending over three years, two of which are to be undergone after they have taken the degree of B. A. or B. Sc. By such improved legal training, carried out under the supervision of capable teachers, we may reasonably hope that our graduates in Law will be, not good Lawyers only, but educated gentlemen as well." I seek to justify this rather lengthy digression as a strong support by such distinguished authorities of my suggestions.

Since the establishment of the Madras Law College, the aim has been to give greater prominence by the University to the subjects of Jurisprudence and Roman Law. From the commencement of 1902, the College was converted to a whole-time institution, the hours of each working day being fixed between 10 or 11 A.M. and 4 or 5 P.M. A permanent staff was appointed consisting of a Principal, a Junior Professor and two Assistant Professors. In 1907, the Secretary of State for India permitted the then Junior Professor, Mr. Odgers, to practise; and a similar concession was also extended to the two Assistant Professors, though they did not avail themselves of the concession thus granted to them.

to the fullest extent. Since 1907 the question of certain re-arrangements of the College staff is being considered by the authorities.

Management:—Subject to the control of the Director of Public Instruction, the general management of the Madras Law College is vested in a Council which shall consist of two or more Judges of the High Court, one of whom shall be President, the Principal, the Junior Professor and such other members as may be appointed by the Government. I would suggest that the management of the Government Law School at Bombay should be vested in a Council more or less similarly constituted, but that the control of the Director of Public Instruction be removed and that the Council should be made responsible to the University. So far as finance is concerned, the Government may collect the fees from the students through the Bank of Bombay and make a grant every year to the University who will administer the funds. The University should have the power of appointing the members of the staff of the College and fixing the courses of instruction, etc. The executive management of the College may be vested in a Senatus of the College, consisting of the Principal and the Professors, subject to the control of the Council.

Staff:—In your letter, you say, "it is also feared that it will be difficult to secure the services of well-trained lawyers for the Principalship and Professorial staff of the School, if it be made a full-time institution, because such lawyers would naturally find it more advantageous to prefer practice to teaching." This is, no doubt, a real difficulty. Before the Madras Law College was converted into a full-time institution in 1892, it was

possible to secure the services as Professors of such distinguished lawyers as the late Mr. C. Ramachandra Rao Sahab, the Hon'ble Sir P. S. Sivaswamy Aiyar, the late Hon'ble Mr. V. Krishnaswamy Aiyar, and the Hon'ble Mr. Justice T. V. Seshagiri Aiyar. Since 1892, however, the quality of the staff has not been maintained, and there is loud complaint here that the staff of the Law College now is not what it ought to be. But we must be careful and see to it that the remedy is not worse than the disease. The obvious remedy is to revert to the earlier system under which lectures were delivered either in the mornings or in the evenings. But I hope to show later on that nothing can be more disastrous to the healthy growth of sound legal education in the country.

The reasons which have brought about the unsatisfactory nature of the staff of the Madras Law College cannot be entered into here. But, certainly they are not to any large extent, due to the full-time character of the institution. And if the authorities concerned here only wanted it, they could have got the services, not indeed of the leaders of the Bar, but certainly of "well-trained lawyers," fit to discharge their duties efficiently as Professors. The remedy lies, in my opinion, in increasing the emoluments of the Professors and in allowing them to have such practice as will not interfere with their duties in the College. We may well rely on their sense of duty to ensure that their dual functions do not collide with each other. And they may be given some latitude in arranging the time when delivering their lectures. Besides this, the Principal and the Senior Professor should be full-time men; as these places are likely to carry decent salaries they

will attract really good men. They will always be at the College and available for tutorial work and for supervising Library classes. Finally, eminent men at the Bar should be requested to deliver special courses of lectures on important aspects of the subjects contained in the curriculum, or on general aspects of law, to the students. Since these courses can be easily arranged to suit the convenience of these gentlemen, it ought to be easy to secure the services of the most eminent men at the Bar for this work. And if the nomination of all these Professors is in the hands of competent and honourable men, as it will be, I have no doubt that the full-time character of the institution will not detract from the quality of the instruction imparted in the College.

Again, in the curriculum itself, there are certain subjects which are likely to be better taught by one who has made a scientific study of law than by one whose attention has been claimed by a large practice, *e.g.*, Jurisprudence and Roman Law. For the teaching of such subjects, it ought to be easy to secure the services of brilliant students of law at the Bar, who, for one reason or another, are not over-weighted with practice. Again, a leading practitioner cannot, in the nature of things, be expected to give of his best to the College when he comes there fagged after a hard day's work.

Is the institution to be a full-time one?—I have no hesitation in answering this question in the affirmative. I have cited distinguished authority already for it. I am anxious that the Law School should be as efficient and inspiring a place of instruction as any other educational institution. Even in Madras the institution was till recently, full

time only in name. Things are improving now but still the ideal is far away from the actual. The hours of instruction must be spread out from 10 or 11 A.M. in the morning to 4 or 5 P. M. in the evening. The work of the day must begin at 10 or 11 A.M. with a lecture and should be followed by a tutorial class or classes for students in smaller groups, so that the Professors may test the progress of the students and the students may have their doubts arising from the lecture cleared. Then the students will be required to work in the Library for one or two hours every day; and the day's work must close with one or two lectures. Thus will the institution cease to be a place where students gather for a few minutes every day to keep their terms, and develop into a genuine place of learning where students will breathe the true collegiate atmosphere, will be under the wholesome discipline of their Professors for the best part of the day; will be encouraged to spread out their work throughout the year; and will have opportunities of moving with one another and of knowing their Professors intimately. Such, surely, is the ideal of a College, and I will not be satisfied with anything less.

In your letter you say, "The Committee has to consider whether the Law School should be made a full-time institution. If effect be given to it, it is feared in some quarters that it will hit hard and prohibit from legal education and its resultant advantages in life, those graduates who have to maintain themselves by some employment while pursuing legal studies, with a view to follow Law ultimately as their profession." If figures can answer this difficulty, they have supplied an effective answer in the negative, in Madras. It will be recalled that in 1902

the Madras Law College was converted into a whole-time institution. In 1901 the number of University students in the Law College were 256, in 1900, 233 and in 1899, 399. In 1902, the year of the introduction of the new scheme, the number of students was 277; in 1903, 361; and in 1904, 334. And in the last three years 1912, 1913 and 1914, the numbers have been 498, 451 and 442 respectively. And it does not require much imagination to see that, if there be any reduction at all, it will be mostly of students who are not *bona fide* students at all, but who keep their terms at the Law College on the off-chance of passing the examination. They may not even have any serious idea of practising law. Such students are bound to act as an evil influence in the College. They are not likely to bring to the College the true scholastic attitude, and they tend to corrupt *bona fide* students. So it is much better that these undesirables should be weeded out, than that the whole tone of the College should suffer.

Time was when we wanted as many lawyers as we could get. But now the conditions have changed. And so we may fairly insist on a high standard. The bogey of hardship is raised in vain. Those who really care for the advancement of sound legal education must boldly come forward, and they will find that there is no hardship except to those who do not deserve their sympathy. The *bona fide* students will tend to increase in numbers in a whole-time institution, and the whole tone of the College will be consequently raised.

Qualifications for admission to the Law College:—I do not know what exactly are the qualifications for admission to the Law School at Bombay. Here only graduates are admit-

ted. I would insist on the same qualification for admission to the Law School at Bombay, false analogies from Great Britain, notwithstanding. English is a foreign language to us, and all would-be Lawyers and Judges must have at least graduated in Arts before they take to the specialised study of Law. Out of this arises the question whether the course at the College should be a two or three years' course.

The length of the course at the Law College:—Till very recently the course in Madras extended only over two years. Recently it has been extended to three years and the change was sanctioned by the Government only last July.* At first sight, it may seem hard on students that they should be compelled to stay another year at College. But, if before a man is to be allowed to practise the profession of Law and to hold the Degree of Bachelor of Laws, he must show a certain amount of efficiency in certain subjects of Law, which cannot well be taught in less than three years, it is irrelevant to consider the hardship which may fall on some students.

And is there a real hardship? Herein Madras, for the M.B. & C.M. Degree in Medicine, a student has to be at College for five years after passing the Intermediate examination, and for the B. C. E. Degree in Engineering a student has to be at College for three years after passing the Intermediate examination, and to do a year's practical work. Then it is certainly not unjust that one should insist on students spending three years at the Law College after graduating in Arts, especially as Law is at least quite as difficult to learn as Medicine or Engineering.

* The course has since been changed into one of two years.

Of course, if as in England, we can have two agencies here, one for training students for University Degrees in Law, and another for training students for the practice of the Law, for example, the Universities and the Inns of the Court, we may possibly make the University course a shorter one. But whereas in India we have to provide that a Degree in Law means not only conferring an academic distinction, but the right to practise Law, without any further training—this is the condition of the Madras Presidency, except at the High Court, where a period of apprenticeship under some Vakil has to be served before enrolment—we must see to it that the course of studies and the training which the students receive at College are comprehensive enough. And, if we cannot provide it in less than three years, then we must make the course a three years' one.

Of course, it does not necessarily follow from this that there must be a *University* examination at the end of each year. Some subjects like Procedure, etc., I do not like to see included in a University curriculum. An examination for a University Degree ought not to include highly technical and practical subjects. But if they have to be taught, the students' proficiency in them may be tested by examinations conducted by the College authorities. I would prefer a University examination at the end of the first year, in Jurisprudence, Roman Law, General Law of Contracts and Torts; a class examination at the end of the second year in the Procedure Codes, the Limitation Act, the Evidence Act, and some local Acts, and a Degree examination at the end of the third year in Hindu Law, Mahummadan Law, Constitutional Law of England and of India, General Principles

of Evidence, Criminal Law, the Law of Transfer of Property and Trusts and Easements and the English Law of Property or preferably some elements of a continental system of Jurisprudence, e.g., the French.

Though the hardships, which students who fail in the examinations are put to, ought to be mitigated by half-yearly examinations for those who have failed, I am anxious that students should not be encouraged to stick to Law when they are really unfit for it. Therefore, I would suggest a rule that, if students have failed thrice in any examination, they ought not to be allowed to appear for the examination again.

I give here the outlines of the New Regulations for the B.L. Degree examination of the Madras University which may properly be looked at for purposes of comparison. For the first examination in Law, a student must have graduated in Arts, been at a Law College for a year and must produce certificates of good conduct and progress from the Principal. The subjects are Jurisprudence (Analytical and Historical), Roman Law, Contracts including the Indian Specific Relief Act and the Indian Negotiable Instruments Act (2 papers), Torts and Indian Constitutional Law. The time-table of examinations in, and the marks for, the various subjects are as follow:—

	Subjects.	Marks.
First day.	10—1 Jurisprudence	... 100
	2—5 Roman Law	... 100
Second „	10—12 Indian Constitutional Law.	70
	2—5 General Contracts with Specific Relief	... 100
Third „	10—1 Special Contracts with Negotiable Instruments.	100
	2—5 Torts	... 100

A student is declared to have passed only if he gets $\frac{1}{3}$ of the total marks in certain groups of subjects taken together and 40% of the total number of marks. This rule applies to all the three examinations.

For the second examination in Law, a student must have passed the First examination in Law, been at a Law College for a year after passing that examination, and must produce certificates of good conduct and progress from the Principal. The subjects are: The Law of Property with special reference to the Transfer of Property Act, the Law of Trusts and Easements, with special reference to the Indian Trusts Act and the Indian Easements Act, the Indian Succession and the Hindu Wills Act, Hindu Law, Muhammadan Law, and Criminal Law (Indian Penal Code.) The time-table of examinations in, and the marks for, the various subjects are as follow :—

	Subjects.	Marks.
<i>First day.</i>	10—1 The Law of Property I.	100
	2—5 The Law of Property II.	100
<i>Second.,</i>	10—1 The Indian Succession, Hindu Wills and Indian Trusts	100
	2—5 Criminal Law	100
<i>Third.,</i>	10—1 Hindu Law	120
	2—4 Muhammadan Law	60

For the B.L. Degree examination a student must have passed the B.L. examination and been at a Law College for a year after that and produce certificates of good conduct and progress from the Principal. The subjects are the Civil Procedure Code, the Criminal Procedure Code, the Law of Evidence, the Principles of Indian Limitation Act and Statutory Interpretation, the Madras Estates Land Act, omitting schedules, and the

Madras Recovery Act (2 of 1864). The time-table of examinations in, and the marks for, the various subjects are as follow :

	Subjects.	Marks.
<i>First day.</i>	10—1 Civil Procedure Code.	140
	2—5 Criminal Procedure Code	120
<i>Second.,</i>	10—1 Evidence	100
	2—4 Indian Limitation and Statutory Interpretation.	180
<i>Third.,</i>	10—1 Estates Land Act and Revenue Recovery Act	100

I need hardly say that the examination for the B.L. Degree examination is absolutely inconsistent with the requirements of an academic degree.

The Law College should possess a very good Library and get all the leading English, Indian and American Law journals, and facilities should be freely given to the students to use the Library and the Reading Room as much as possible. The Library classes and the Reading Room should be under the direct supervision of the Professor specially appointed for the purpose. There should be a moot club attached to the College for training students in the forensic art. And the College Moot-club, the College Athletic Association and the Library and the Reading Room may be entrusted to the management of a Students' Representative Council, as it has been in Madras.

There is one other matter on which I should like to address the Committee. I feel strongly that in a poor country like India, where the monopoly of ability is certainly not with the rich, facilities should be provided for comparatively poor students to continue their studies at the Law College. For one

thing, the fees in the Law College should be moderate and the Law College should not be made a source of revenue, as it has been in Madras. The fees are Rs. 75 per term for two terms for the first year and Rs. 100 per term for two terms for the second year. Under the new scheme of the three years' course, it is proposed that the fees for the second year also should be Rs. 75 per term for two terms. This scale of fees is felt to be very heavy in Madras, especially as the Government has been making large net profits out of the College, amounting from the year 1882-83 to 1913-14 to nearly five lakhs of rupees. This is not as it should be. Fees in the Law College ought to be little more than what is wanted for the efficient upkeep of the College; and a system of scholarships ought also to be introduced, partly financed by Government and partly by private individuals to whose philanthropy the College Council can easily appeal, especially in Bombay.

Finally I should like the name of the institution to be changed from the Government Law School to the Government Law College, Bombay. If there is any other matter on which the Committee would like my opinion, I shall be happy to express it. I trust that the Committee will find this memorandum useful.

S. SATYAMURTI.

MY EXPERIENCE OF THE DIRECT METHOD.

I INTEND in the following lines to give expression to the conclusions I have reached regarding the extent to which the direct method of teaching English is likely to bring useful results, when applied to Indian schools. The conclusions are based on about five years' experience with different standards, the lower three in particular.

To obviate dispute about words, let me say that I have understood the direct method to be the method which professes to be able to establish in the learner's mind, direct relations between objects, qualities or actions and their English names, and which thinks the intervention of Marathi a needless obstacle, and which by removing this obstacle hopes to secure mastery over English in far less time than the old translation method took. This is not the same as the conversational method, which epithet implies no claim to establish a direct relation.

To see whether the purely direct method can be economical of time and energy if applied to Indian boys, we must not consider the problem, divorced from the conditions under which the Indian boy studies. Is it possible that an hour of English can maintain the vigour and vividness of its impressions during the remaining 23 hours of Marathi? Sometimes the father teaches his son at home. He takes the line of least resistance. Now the direct method is the line of greatest resistance to the teacher, requiring in him a special skill. This cannot be expected in the parent who unwittingly counteracts the method pursued in the school. The value of a uniform method cannot be overrated. Before a teacher begins with a new class, he should clearly explain the method in teaching every subject he would handle in the year, so that the class knows how and where the teacher means to assist them. Whenever therefore a teacher has a scheme ready in his mind, and is working it out,

he is right in resenting any tampering with it. Nor on the other hand can we sweepingly say that it is none of the parent's business to teach his son. Here we light on a real difficulty which has not received the consideration due to it. The professional teacher is therefore compelled to meet the translation method on some terms.

Attend a first standard being taught English by the direct method. If the teacher at all admits that boys have understood him, he must admit too that they understood him through Marathi. It is impossible to establish a direct relation between an object and its English name, where an already existing vernacular dominates for the best part of the day. When a thing has been associated, since earliest childhood, with a certain name, it is never possible to complete the circuit between the brain and the foreign name without the interposition of the vernacular. Some English words do indeed immediately awaken images of the corresponding objects, because they have permeated the being of the common people. The frequent use of a foreign word by all classes of people tends to naturalise it and enables the interposition of the vernacular to be dispensed with. The mixed Anglo-Marathi so much used by our educated is daily giving more currency to words, which in time will be common property. But this can never happen to those subtleties and intricacies that make brief, terse, vigorous and elegant English. What is possible is a translation method coupled with conversation.

The fault of the old method was *not* that it translated. It erred by neglecting to fix the idiom by repetition. Its was not a fault of commission, but one of omission. It achieved one thing—the exact understanding of written English—and this, I believe, it did in shorter time and greater certainty, than does the direct method by pretending to have shut out Marathi. The translation method avowedly placed the English and the Marathi idioms side by side and

pointed out how they differed. It however failed in another thing—the ability to speak correct English—and this is the very thing we set more value upon in these days. I own that that method never made an organised and sustained attempt to teach the speaking of English. No wonder that it did not achieve what it never attempted.

Understanding English and speaking it are things as far removed as any two things could be. The first is a silent process of the mind; the second is an active occupation to the tongue. The first is theory merely to be understood; the second is practice, with the grace or clumsiness attendant on it. The methods pursued for objects so different can never agree. One is almost led to say that no "better and worse" can be pronounced about methods which set before them objects so heterogeneous.

I do recommend the use of objects and the performance of actions, since these help to make the lesson real. A history lesson in which old coins, prints, weapons, facsimiles were introduced; a geography lesson in which relief maps, sand models, temperature curves were shown; a geometry lesson in which paper triangles, figures of bamboo strips, actual planes of cardboard were handled, made or shown; an English oral composition lesson in which broken bits of sentences were required to be made up into a readable paragraph; all these are direct method lessons. In like manner the direct method in English can facilitate its work by introducing things or performing actions. But if it flatters itself on having ousted the vernacular as the medium of reaching the boy's brain, it is labouring under a delusion.

How far the things shown and the actions performed help or hinder the acquisition of the language is a point worth analysis. Often have I noticed that the objects absorb more attention than the form of expression. In a language

lesson, *the objective is the form of expression*; the objects must subserve this purpose. The form of expression is clearly a less concrete thing than the object talked about and therefore less likely to arrest attention than the latter. If the objects usurp the attention that is owed to the form of expression, *the lesson fails as a language lesson*. Another thing; with us, very little gesture accompanies our talk, just as with the French there is too much of it. An elderly Indian will believe his dignity to suffer by the gestures that an Englishman would deem essential to convey his mind. The result of this divergence of view is serious. In a class of young boys, the direct method teacher is likely to be looked upon and estimated as a bit of a contortionist. In Indian schools, before Indian boys, an Indian teacher should calmly decide how much of the boy's vivacity is due to a serious interest in the language used by him, and how much to the attitudes he assumes, the faces he makes and the objects he displays.

When a direct method teacher explains words and phrases new to the class, he usually invents a story or a context and then he pushes his phrase into the right place. He has to invent as many situations as there are idioms in the lesson, needing to be cleared up. The situations are from the nature of the case, abrupt and disconnected. But the teacher does it because he believes that his ingeniously-devised explanation is going to drive the meaning home quicker and without the need of Marathi. Need, forsooth! scrutinise the boy's mind from within and you will see that the teacher's utterances are co-ordinated in his brain in the garb of Marathi. This teacher is like the idealist who gets his ideas from the real things in nature and then turns ungrateful on them, denying their existence. When the teacher comes to explain phrases, his method is still more uncertain in results. I quote instances from a book intended to follow the direct method. "They stated their case=Each

spoke for himself. Change his mind=Think of something else. Deign to hear=Kindly hear. Held his court=Sat down to hear the case. Value my services=See how useful I am." From these explanations how is the beginner to sift out the exact meaning and application of "case, change, deign, court, service"? Will he not stumble if he comes across these words in other contexts? From experience I say that best results are obtained by translating these words and then the teacher might invent occasions where those words would be fittingly used.

The direct method is said to develop early the power to use English. Everyone will testify to the sharp questioning and answering among boys taught by this method. But *post hoc* is not *propter hoc*. The sharpness is solely the result of the repetition of a lot of questions and answers, not in any degree due to the alleged establishment of a direct relation between object and its English name. Even if the translation method were used and followed up by plenty of repetition the same sharpness could be cultivated.

Boys are said somehow to fail in using English with ease and quickness when they come to the upper standards. The reason is that the paltry questions and their complete answers (which Mr. Fraser deservedly condemns) which are practised with a vengeance in the lower three standards are regarded as silly child's play by the IV Standard boys; and rightly. In their place nothing becoming their dignity is substituted. In upper standards the English teacher ought to devise questions requiring a steady three-or-four sentences in reply, not a single spurt. I suspect also that the interest first aroused by the novelty of the method, the high hopes swimming before the learner's eyes, the variety of the objects brought in and the action attending the lesson, slowly dies out as the boy finds it hard to thread his way through the teacher's English explanations of a peculiar turn of expression he would be glad to have understood in a moment by

translation. Such a boy has traversed over a very limited mass of isolated particulars, and so has few general rules to go by when he begins to compose. He has not read nothing; nor has he read so much as to safely depend on the look of a sentence to be sure of its correctness. He has formed the habit of building up the meaning from odd bits inferred from the teacher's gestures and explanations. In the depths of his brain there always lurks a suspicion that all is not well with this sentence. And in upper standards boys have often asked me for the translation of an apparently easy sentence and have expressed bewildering surprise at their disillusionment. Indeed they had never understood till then the exact force of the particular word or phrase. Why? Because the direct method leaves behind it a sort of vagueness and haziness impossible when translation is resorted to. Our hypothetical boy fortunately sees the situation before it is too late and secretly takes to learning the Marathi meanings of English idioms from a meaning book in a sequestered corner where the tread of his direct method teacher shall not be heard. Virtually he decides on a comparative study of Marathi and English idiom as the only road to mastery over the easy use of English.

So far I have made destructive comments. At their back however there is conscientious experiment and experience chequered by successes, failures and disappointments. Now I proceed to indicate lines along which a reconstruction is possible.

I suggest a return to the translation method coupled with conversation. This is not the old method quite. In the old days translation was ridden to death. It is sheer folly to translate every word from Standard I right up to Standard VII. Such procedure implies stupidity and stagnation as the normal condition of the boy-mind. With more reading the need for translation must decrease.

In the class-room the English material poured into the ears of a boy must needs be limited and therefore it has to be very well assorted, to ensure its being made most of. This sorting is not to be done on the vague distinction between 'easy' and 'difficult.' The sentences in an *easy* primer are often the most difficult for an Indian boy to grasp. Because the beginner assimilates in Marathi. Let us not be led away by the idea of a beginner "understanding in English" which is altogether different from "understanding English." The idea is visionary; it is altogether blind to the strength of first impressions; it fails to give due weight to early and even pre-natal influences on the brain; it under-estimates the width of the gulf between conscious elaboration and unconscious spontaneity. Let us clearly understand that English is always understood by Indian boys as it appears in the *vernacular* garb, until a very late stage has been reached. The direct method *appears* to antedate this stage by several months, which therefore *appear* to have been saved. To return to the distinction between 'easy' and 'difficult.' What are easy constructions to an Englishman are often not so to an Indian boy. On the contrary what are difficult constructions to an Englishman are sometimes easily grasped by Indian boys. They go wrong only when the idioms diverge. The difficulty of English to Indian boys is exactly proportionate to the divergence of its idiom from the Marathi.

The difficulties of the English language must therefore be drawn up and arranged according to their greater or less divergence from the Marathi idiom (See Editorial remarks in "Indian Education" for March 1915). This must be done with the collaboration of an Indian. For he alone can see where and how his idiom departs from the English. That done, a series of progressive readers should be compiled. The first should begin with lessons in which the build and expression of the sentences differ little, if at all,

from the Marathi. The lesson should aim at being a continuous whole and not merely a string of illustrative sentences. As the book proceeds three or four idioms may be used in each lesson. Though used deliberately they must appear natural in the context and throughout the lesson they should recur sufficiently often. Idioms utterly divergent from Marathi should be reserved for the advanced readers.

When doing a reader of this kind there is no need to translate every English sentence. This will be necessary only three or four times with each new idiom. On other occasions the idiom is to be fixed in the mind by the constant use of it in varied contexts. I am persuaded that good Indian speakers and writers of English have attained their results just in this way—by comparing the two idioms, then fixing the English idiom by noting and digesting its peculiar make.

K. S. DANDEKAR.

ENGLISH IN SCHOOL.

The "Times Educational Supplement" writes:—
Hail, native language, that by sinews weak
Didst move my first endeavouring tongue to speak!

So says, in effect, the author of the series of articles, which we conclude to-day, on the Rediscovery of English; and he bids others join in the salutation. Certainly the study of our own speech deserves better recognition. Its neglect, all the more reprehensible when every one is supposed to read and write, is a national shortcoming. Man is a thinking animal; language is the instrument of his thought; English, the instrument of the Englishman's thought. Yet there is not a class in the community which is capable of using that instrument as it should. Bad English, which means badly expressed thought, abounds. Badly expressed thought is a disadvantage alike to the thinker and to the person with whom communication is attempted; it is a waste of time, and a source of misunderstanding; it prevents many a man who has the right stuff in him from profiting by his skill, or knowledge, or force of character. It is everywhere one of the root-causes of incompetence. No one can be said to be educated for his task in life, whatever is station or employment, if he cannot, when occasion demands, set down clearly and in order his thoughts on paper. Practically every one in the course of his daily duties has to take pen or pencil in hand. Yet literary slovenliness in capacity to deliver himself intelligibly, may involve a subordinate in dismissal and his principal in a law-suit. The loss to the community in time and money due to bad English must be prodigious. Of all the "useful" subjects taught at school, English should rank first; for thought can never be too clearly transcribed or a statement too accurately drawn up. Nothing else that is taught can compete with the practice of the mother-tongue, for it underlies all things.

There are also other reasons for a "re-discovery" of English on which in the course of his long exploration our correspondent has touched. They relate to school methods. The learning of English should begin at a stage which is preliminary even

Lower Secondary Arithmetic

BY

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Rs. 1 per copy.

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to reading and writing. Proper attention must be given to grammar, and to the formal scaffolding of language; and, above all, to composition, honest composition, that is, and not the aping of mature writers by immature minds. In this respect reform is already at work; essays on difficult abstractions are not set so frequently as they were. Our correspondent points also to an intensive study of texts, in the manner of the French "explication;" such a study will not seem strange to those who have gone through the classical mill and learnt their English through it; but to those for whom English is to be the chief or sole source of grammatical and literary training it would mean a discipline under which they might otherwise never come. We are the inheritors and the trustees of an instrument of thought which can hold its own with any other; but as a nation we have not been taught either to use it carefully or to get the best out of it. A more responsible sense of scholarship ought to be and could be encouraged. What has been possible with Latin and Greek should be equally possible with English; in fact, it should be easier. Taught on the right lines, nearly every one of intelligence might become a scholar in English, with a real feeling for form and much else that scholarship implies. The Bible and Shakespeare would then receive more than lip service, and the shoddiness of the second-hand claptrap which too commonly masquerades as thought would be taken for what it is worth.

UNIVERSITY OF BOMBAY.*

Mr. Chancellor, Members of the Senate,
Ladies and Gentlemen—

WILLIAM WORDSWORTH.

Since we met in Convocation last year, there has passed away, in a distant land, a former Vice-Chancellor of this University, who, during his long and brilliant career as Principal of the Elphinstone College, left a lasting impress on the generations of students that came under his influence. The real purpose of College education, according to Dr. Wordsworth was, not to fill the minds of young men with a certain amount of knowledge, to enable them to pass Examinations, but so to train their intellect and form their character as to make them honourable citizens and useful members of society. He was himself a standing example before his pupils, not only of a profound scholar and learned professor, but also of a citizen who took an active and useful part in the educational, social and political advancement of this country. He fully sympathised with the efforts of Indians for securing greater political freedom and greater control over the affairs of their country and consistently helped and guided them in such efforts. On one occasion, speaking in the Senate, he made the following remarkable observations:—"The Indian people, by the counsels of Providence, have been brought into contact, I would rather say, into partnership, with the most restless, progressive and enterprising Nation of Europe—a people who have their very being in liberty and free discussion, and whose example is so contagious that it affects all who come within its sphere. Deliberately and without craven fear, we have invited the youths of India to study our history and our literature. We have permeated them with our ideas, and held up ourselves as a worthy example for their imitation. We have done all this, and, can we now imagine that it is possible to retain a people, whom we have thus aroused, stimulated and enlightened, in the leading strings appropriate to a time which has for ever passed away?"

In what deep respect, love and admiration, Dr. Wordsworth was held by the large number of students who had come under his magnetic influence, was demonstrated on the occasion when this Univer-

* Address delivered at the Annual Convocation held on the 21st August 1917, by the Vice-Chancellor (Mr. Chimanlal H. Setalvad).

sity conferred on him the Degree of LL.D., on the eve of his retirement in the year 1910. This hall was then crowded to its uttermost capacity by citizens of all communities who had assembled to do him honour, and the scene of his students, past and present, escorting him in a torchlight-procession to his residence, in which procession I had the privilege of joining, has never been surpassed in the annals of this University. Dr. Wordsworth has gone to his last resting place in the historic city of Rome, near the spot where Keats and Shelley rest, but his teaching and example will always inspire the minds of the youth of this land with that robust patriotism which he did so much to create and stimulate, and his attributes and conduct will always evoke genuine admiration for the nobility of the British character which he so eminently typified in himself.

DADABHOY NAOROJI.

We have also to mourn the loss of the greatest and noblest son of India, Dadabhoi Naoroji, on whom this University, in special Convocation, conferred the Degree of LL.D., only last year. At a time beyond the memory of many, he was known as "Professor Dadabhoi," having occupied the Chair of Mathematics at what was then known as

the Elphinstone Institution. His life was unselfishly devoted for over half a century to the service of the motherland in a manner which made him a valuable asset not merely of this country but of the Empire. It is not necessary for me this evening, to dilate upon his manifold activities, and his patriotic work in the field of education, social reform and politics. The citizens of Bombay are meeting in a short time for the purpose. But this much I will say, that, throughout his long public career he always emphasised and maintained his unswerving faith in the sense of fairness and justice of the British Nation, to whom he looked with confidence for the ultimate realisation of his ideal of the attainment by this country of Self-Government within the British Empire. To him the poet's description of a genuine patriot very fittingly applies:

Statesman, yet friend to Truth! of soul sincere,
In action faithful, and in honour clear,
Who broke no promise, served no private end,
Who gained no title, and who lost no friend,
Ennobled by himself, by all approved.

THE WAR AND THE UNIVERSITY COMPANY.

This day twelve months ago, Mr. Chancellor, in words weighty and eloquent, you unfolded to us the

DRAMATIC HISTORY OF INDIA

—29 PLAYLETS—

By FLORA ANNIE STEEL,

AUTHOR OF "TALES FROM THE PANJAB," "INDIA THROUGH THE AGES," ETC.

PAGES 188. PRICE RE. 1.

OPINION.

This book gives us 29 remarkable incidents and stories of Indian History, each dramatised with vividness and set forth in picturesque and appropriate back-ground. It is a fortunate circumstance that the gifted authoress has brought all her genius to bear upon this work—the first of its kind, so far as Indian History is concerned. The dramas must most effectively appeal to the imagination of school boys and enable them to realise what the incidents themselves must have been like. The dramatised incidents cover the complete range of Indian History from the coming in of the Aryans down to the Delhi Durbar of 1911. Some of the playlets are extremely moving and pathetic and grand in their simplicity. We may single out some, viz., the Story of St. Thomas in the kingdom of Gundaphar, Princess Krishna Kumari, and the story entitled 'A Breathing.' The sweet harmony and simplicity of Aryan life, Chanakya's skill, Asoka's rectitude, the golden age of Samudra Gupta—these and many others are vividly brought into bold relief before our minds. The plays are written in simple dialogue form, and this will give our boys an opportunity of reading good English in simple form, whose value to young minds we cannot overestimate.—*The Educational Review, Madras (July, 1917).*

COOPER, PUBLISHERS, BOMBAY.

Banade of mighty intellect and Kashinath Telang of quick and subtle mind, and ardent patriots and leaders of men like Pherozeshah Mehta and Gopal Krishna Gokhale. The example of every one of them must have been, and will always be, a source of inspiration to hundreds and thousands of young men of this country. And I have the support of responsible official pronouncements that University Education has on the whole been a success. The Education Commission of 1882, after quoting from the Despatch of 1854, the observations regarding the good results to be expected by the spread of European education among Indians and the attendant adoption of the high moral tone which pervades the literature of Europe, proceeded to ask the question,—To what degree have these expectations been realised? They then give the following answer: "Our answer is in the testimony of witnesses before this Commission, in the thoughtful opinions delivered from time to time by men whose position has given them ample opportunities of judging, and the facts obvious to all eyes throughout the country, and that answer is conclusive; if not that collegiate education has fulfilled all the expectations entertained of it, at least that it has not disappointed the

hopes of a sober judgment." Lord Curzon's University Commission in 1902 declined to endorse the sweeping condemnation of our University system and considered that many of the criticisms passed on the Indian Universities were not deserved.

I also maintain that we in the Bombay University have on the whole managed our somewhat difficult task, well. So far as the government of the University and its affairs are concerned, I claim that we have carried it on all these years, in a manner that cannot be open to any serious criticism. Generations of Fellows have ungrudgingly rendered honorary services and devoted time and attention in the Senate and the Syndicate to the work of the University, for no return except the satisfaction of having done their duty in the educational advancement of the rising generations of their countrymen. Our University has always endeavoured to keep pace with modern developments in educational ideas and theories. In addition to Arts, Medicine, Law and Engineering, we have instituted degrees in, and have encouraged the study of, Science, Theoretical and Applied, in all its branches, and have also brought Agriculture and Commerce within the sphere of University education. While, therefore,

ESSAY-WRITING.

A boy cannot write an essay if he has no material to write about, and no teacher who knew his business would deliberately increase the difficulties of composition by adding difficulties of material.

Mr. Wren's "**Essay-Writing: Models and Materials**" (Second Edition—Price, As. 6) is designed to supply the necessary material. It contains:—

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K. & J. COOPER, Educational Publishers, BOMBAY.

I repel firmly the charge of failure sometimes levelled against our University, I should not be understood for a moment to assert that there is no room for improvement. I sincerely believe that, if we are to maintain the good work that we have done and to achieve greater and more real good, we must clearly realise some very serious drawbacks under which we labour and define to ourselves the directions in which we must move in order to remove them.

ESSENTIAL CONDITIONS OF SUCCESS: (1) INDEPENDENCE.

But before I deal with these matters, I would invite attention to certain conditions of success for a University like ours and which must always be steadfastly kept in view. I am convinced that, there are two essentials for success of a University placed in the midst of a big and progressive city like Bombay. The first and foremost is that, the University should in fact be, and should be made to feel that it is, independent of any external authority and realise the full measure of its own responsibility. This fundamental proposition was clear to the minds of those great men who founded this University and were responsible for its early administration. At the Convocation for Conferring Degrees in the year

1866-67, the Vice-Chancellor, Sir Alexander Grant, who, after having served as Principal of the Elphinstone College with great distinction, was then Director of Public Instruction, in a farewell address, on behalf of the Senate, to H. E. The Chancellor, who was about to lay down his high office, said:— "While acknowledging the benefits of the lively interest which Your Excellency, as our Academical Head, has thus shown in our welfare, we beg to thank you, for the equally valuable forbearance which, as head of the Political Government, you have exhibited towards us. A University like ours occupies necessarily a delicate position. Its members are all appointed by Government, it derives all its current resources from the Imperial Treasury; and its acts are all subject to the veto from the Local Administration. Under such circumstances,—especially in India where it is often felt that all else, except the Government, is uncertain and fluctuating,—there cannot but be a tendency for a University to lose caste, as it were, and to come to be regarded as a mere office or department of the State. What is to be apprehended from this tendency is not only loss of dignity to the University itself, but also a loss of the highest kind of

ENGLISH CONVERSATION.

In the first instance, there must be something to talk about—some subject in common between the teacher and his pupils, for then and then only can the teacher hope to interest his pupils and encourage them to express themselves in simple English. "**Picture Composition**," by J. Nelson Fraser (Second Edition, Pupil's Book, As. 8; Teacher's Book, As. 12) furnishes materials of this type in abundance. Each set of pictures can be utilised as the basis of conversation lessons or as providing subject-matter for "free composition." Besides, the effort made by the pupils to interpret a "picture-story" will not only develop self-expression, but will also train their powers of observation and stimulate their imagination.

Teachers are requested to give a fair trial to "Picture Composition" by using it in the class-room for at least one term. The results will surpass their best expectations.

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efficiency in its working. For the mission of a University, in a country like this, is nothing else than to create an intellectual and vital soul among the people; and there can be no question whether this mission is likely best to be fulfilled by persons feeling themselves nominated merely to carry out the views of a Government, or by the free and enthusiastic action of men feeling responsible to themselves for the good or bad success of the University. It is under jealous and centralising administrations, that a University like ours, tends to lose its liberty. But Your Excellency's administration has ever been characterised by the most large and liberal sentiments. And these sentiments you have especially manifested towards us." The Chancellor, Sir Bartle Frere, in his reply, observed:—"You have spoken of the forbearance which, as the Head of the 'Political Government,' I have exhibited towards this University, and you do me no more than justice in inferring that what you term 'forbearance' has not been the result of lukewarmness or indifference but of a clear conviction that the Political Government of

this country could hardly commit a greater mistake than by attempting to convert the University into a 'mere office or department of the State.' I have ever felt most strongly the importance of those truths which you have so well expressed in your address that any loss of dignity or independence in the University involves a loss of the highest kind of efficiency. During all the years that I have passed in this country, I have felt a continually deepening conviction that, whatever absolute power may do to impress any particular image on the material with which it works, it cannot create any principle of life in institutions or communities and that the vital force which lives and grows, and has the germ of further life and further growth, can only result from true natural organisation, and is infinitely more potent and valuable than any dead image which external power can impress. It has been the object of this Government to draw to the Senate of this University all the independent thought and educated ability which is within our reach, and we firmly believe that no man worthy to be a Fellow of this University would consent to serve as a mere

STORY-REPRODUCTION.

The story must be such as will interest and appeal to the Class by reason of the familiarity of its atmosphere and sentiment.

It must have some sufficiently obvious point or simple moral.

The language of the story must be plain and simple.

Mr. Wren's "Short Stories for Reproduction" (140 Short Stories: New Edition. Price, As. 6) fulfils all these requirements, whereas the same cannot be claimed for any book published in Great Britain and avowedly meant for English children.

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nominee of Government, bound, in any way, to prefer the behests of that Government to the dictates of his conscience or independent convictions.....I and my colleagues in this Government have felt that, if forbearance on the part of Government is sometimes needful, still oftener is forbearance called for on the part of the Senate, when the habits and language of the Government may seem to imply a desire to dictate which in reality does not exist. Generous trust and forbearance on both sides are needed to insure life and growth in the joint work." These great truths were destined unfortunately, to be obscured and forgotten in the subsequent career of this University. As Sir Alexander Grant observed, all except the Government is uncertain and fluctuating in this country; but the individuals comprising that inscrutable body, the Governor-in-Council, are frequently changing, and with the change of individuals come changes of views and policy. And so it happened

that, the principles which Sir Bartle Frere so eloquently laid down as immutable, came to be disregarded and forgotten after a lapse of fifty years, with the deplorable result that a little time before Your Excellency became Governor of Bombay, and Chancellor of this University, such a strong feeling of distrust was created between Government and the University that the real interests of education were seriously jeopardised. The unhappy incidents that led up to this state of things are well known and I need not refer to them. It is best that a veil should now be drawn over them and the painful memories of them should not be revived, more especially as, since Your Excellency assumed the reins of Government, there has been a gradual but steady restoration of the old relations between the University and the Government. The last but the greatest cause of irritation is being removed by the proposals regarding the Joint Board Scheme for a School-leaving Examination

A SHORT HISTORY OF INDIA IN THE MIDDLE AGES

By STANLEY LANE-POOL, M.A., LITT.D.

Price, As. 14.

Written in a vivid style by one who is an acknowledged authority on the History of Medieval India. Read in connection with the same author's "Medieval India from Contemporary Sources," it will give the student a better idea of the period it treats of than any other book of similar scope.

OPINION.

The author's ripe scholarship and vast store of knowledge about Muhammadan India places this book far above the general level of ordinary text-books for boys. There cannot be, for our High School students, a better account of the history of the Pathans and Moghuls in India than this small manual which condenses in its short compass all the merits of the author's larger book on the subject—'Medieval India under Muhammadan Rule.' The student is advised to read this book in connection with the same author's 'Source-book on Muhammadan India' issued by the same enterprising publishers a short time back, and reviewed in the January 1917 number of this journal. The narrative is at once simple, clear and striking and the salient features of Muslim rule and civilisation in India are well brought out. The illustrations are among the finest ever produced in small books such as this and include specimens of the various types of Indian Muslim coins. We commend this book heartily to the attention of both teachers and students in our High Schools.—*The Educational Review, Madras (July, 1917).*

COOPER, PUBLISHERS, BOMBAY.

which is now under consideration and which I earnestly trust will be put through. The spirit of reasonableness in which the University and Government are attempting a solution of this thorny question is a happy augury for the future. I feel certain that, we will soon see complete mutual trust and confidence restored between Government and the University which alone can bring about a hearty co-operation between them for the advancement and betterment of education on right lines. And I think I am voicing the feelings of the Senate in saying that, it is a matter of gratification to the University to learn that Your Excellency has found it possible to consent to remain here beyond the period of your ordinary term of office, as Your Excellency's continuance in office as Chancellor and Governor is a guarantee for the restoration, at an early date, of that complete mutual trust and confidence that I have alluded to.

(2) SUPREME CONTROL OF THE UNIVERSITY MUST BE IN THE HANDS OF CITIZENS.

The second essential condition of success is that, the effective control in the government of the University should be vested not in professors and teachers but in the hands of men of affairs and business, men who, being themselves products of this University, take an interest and pride in its further progress and development. When the University of London was established, the supreme governing body was modelled largely on the type of the constitution of Oxford and Cambridge, and the control came therefore to be vested in teachers and graduates. The recent Royal Commission on the University of London came to the deliberate conclusion that this was a mistake. In their Report, Lord Haldane and his colleagues, after going exhaustively through the question of the government of the University, observe: "The supreme governing body or court must, in our opinion, be of different constitution from the present Senate which is modelled largely on the type of the constitution of the older Universities. These Universities are not dependent upon public funds for their maintenance, and their history makes their government by teachers and graduates reasonable, or at least explains it. The City University is in an altogether different case, and we agree with the Report A of the Academic Council in the belief that the modern City University cannot flourish if the population it mainly serves is indifferent to its welfare." The Report of the Academic Council, to which they make reference,

said: "London will not regard the University of London as an integral part of the City until the University is willing to entrust its supreme guidance to a body composed mainly of citizens." With regard also to the Executive body, corresponding to our Syndicate, the Commission emphatically expresses the view that it "should not as to any large part consist of teachers" and that "the teachers who have seats upon it should not be so elected as to represent particular studies or particular institutions, but merely to insure a mutual understanding between the men of affairs and the men of learning." They further enunciate that the Executive body should be so constituted as to be able to work out a carefully considered policy for the maintenance and development of University teaching. They observe that "Experience has shown that a body made up of representatives of a number of different interests is incapable of formulating a united plan of action" and they therefore recommend that all the members of the Executive body should "as far as possible, be appointed for their personal qualifications as men of business-knowledge and administrative capacity. They say that the teachers should not determine the educational policy of the University, though that policy should be determined in the light of the expert advice which the teachers are peculiarly fitted to give. They suggest therefore the formation of the Academic Council consisting of members elected by the professors from among their own body. The duties of the Academic Council, the Commissioners lay down, should be purely advisory, and it should be so constituted that the Executive body, as well as the supreme governing body, should always have before it the opinion of the University Professorate expressed through its appointed representatives. By wise forethought, those who were responsible for the Universities in this country avoided the mistake that was committed in the case of the London University and which the last Royal Commission deprecates, of vesting the supreme Government in a body composed mainly of teachers, but instead, in the words of Sir Bartle Frere "drew to the Senate all the independent thought and educated ability" available. And this is the real secret of the great hold the Universities in this country have taken on the imagination of the people and of the enthusiasm with which endowments have flowed in from time to time. At the Convocation of the Calcutta University in the year 1866, only nine years after the foundation of that University, Sir

Henry Maine said: "The thing must be seen to be believed. I do not know which was the more astonishing, more striking,—the multitude of the students, who if not now, will soon be counted not by the hundred but by the thousand; or the keenness and eagerness which they displayed. For my part, I do not think anything of the kind has been seen by any European University since the Middle Ages, and I doubt whether there is anything founded by, or connected with, the British Government in India which excites so much practical interest in native households of the better class, from Calcutta to Lahore, as the Examinations of this University." What Sir Henry Maine said in 1866 about the Calcutta University is to-day true in an increased measure of all the Indian Universities. I therefore plead for making the University more broad-based and for further liberalising its constitution by a substantial extension of the elective principle. At present 80 out of 100 Fellows are nominated by Government, 10 are elected by registered graduates and 10 are elected by the Faculties.

AIMS OF A UNIVERSITY.

In maintaining that the wholesale attacks sometimes made on our University education are extravagant and unjust, I conceded that there is considerable room for improvement in many directions. In considering wherein our present system of University education is defective, and what steps are called for to remedy the existing defects, we must first clearly define to ourselves the real aim and purpose of University education, then gather from the experience and history of similar institutions in other countries the conditions which have contributed to success, and then see how far we are lacking in those conditions and how we can create them in our midst. The aim and purpose of University education must be, to create a habit of mind which would last through life, based on correct ideas of freedom, justice, and wisdom and to create a capacity for discipline and sacrifice. Intellectual training is of but secondary importance. Education must make men of character, the mainsprings of which should be dutifulness, courage and honour. The Royal Commission on the University of London observe: "Knowledge is of course the foundation and medium of all intellectual education, but in a

University, knowledge should be pursued not merely for the sake of the information to be acquired, but for its own extension and always with reference to the attainment of truth. This alters the whole attitude of the mind. Scientific thought becomes a habit, and almost incidentally intellectual power is developed. Modern Universities are called into existence principally by the social need for professional training, and probably most of the students enter the University with a purely utilitarian object but they should find themselves in a community of workers, devoted to the pursuit of knowledge for its own sake, and tenacious of this ideal against all external pressure of material and social advantages. Academic instruction is primarily purely theoretical and scientific, and yet it is not only the best training for the conduct of life, but also the best, if not the necessary, introduction to all those professions and callings of which it may be said that practice and progress are closely connected and reacting on each other. Its effect in relation to the profession or calling which the student has in view is that he brings to it not only the discipline, training, knowledge and resourcefulness he has acquired, but also the intellectual mastery of the principle involved which enables him throughout his life to appreciate and apply all advances in science that bear upon it."

Cardinal Newman defines the practical end of University training in the following words:—

"University training is the great ordinary means to a great but ordinary end; it aims at raising the intellectual tone of society, at cultivating the public mind, at purifying the national taste, at supplying true principles to popular enthusiasm and fixed aims to popular aspiration, at giving enlargement and sobriety to the ideas of the age, at facilitating the exercise of political power, and refining the intercourse of private life. It is the education which gives a man a clear conscious view of his own opinions and judgments, a truth in developing them, an eloquence in expressing them and a force in urging them. It teaches him to see things as they are, to go right to the point, to disentangle a skein or thought, to detect what is sophistical, and to discard what is irrelevant. It prepares him to fill any post with credit, and to master any subject with facility. It shows him how to accommodate

himself to others, how to throw himself into their state of mind, how to bring before them his own, how to influence them, how to come to an understanding with them, how to bear with them. He is at home in any society, he has common ground with every class; he knows when to speak and when to be silent; he is able to converse, he is able to listen; he can ask a question pertinently, and gain a lesson seasonably, when he has nothing to impart himself; he is ever ready, yet never in the way; he is a pleasant companion, and a comrade you can depend upon; he knows when to be serious and when to trifle, and he has a sure tact which enables him to trifle with gracefulness and to be serious with effect. He has the repose of a mind which lives in itself, while it lives in the world, and which has resources for its happiness at home when it cannot go abroad. He has a gift which serves him in public and supports him in retirement, without which good fortune is but vulgar, and with which failure and disappointment have a charm. The art which tends to make a man all this, is in the object which it pursues as useful as the art of wealth or the art of health, though it is less susceptible of method, and less tangible, less certain, less complete in its results."

ENGLISH AND GERMAN NATIONAL EDUCATION— A CONTRAST.

Accepting the above statements of the aims and purpose of University education, our thoughts naturally turn to the British Nation with whom, under the dispensation of Providence, this country has been brought into such close and lasting contact. And any impartial observer of British history and British character, I feel sure will declare that, the British Nation has succeeded in a remarkable degree in attaining the above ideal. As a writer has truly observed, the outstanding idea of English education is the gentleman. And does not the present great world-war and its lessons demonstrate the value of English education? See the trained brain-power, the scientific equipment, the intellectual capacity that is brought to bear in the prosecution of the war, but above all, the immense sacrifices that the British Nation is making in men and treasure; see the millions of young men, the flower of the Nation's Manhood from all grades of society, that have gone out voluntarily to fight, not for any lust for power or territory, but for the defence of the weak and the defence of civilisation; they are sacrificing themselves, in order that humanity may profit and live in

peace and all nations, however small, may be left to work out their own destiny without being overawed and terrorised by strong nations. Contrast this with the results of German education. The scientifically organised and highly perfect and efficient system of National Education in Germany, has produced the ideal of German omnipotence, and Germany has waged this war in order that she may be able to impress her will on the world, and that all other nations may live and progress only as Germany should dictate; and, in the methods employed in the prosecution of the war, she has cast to the winds all accepted and sacred notions of honour, of chivalry, of fairness. A system of education which makes it possible to win over the intellectual power of the nation to inhuman ends, must be woefully defective. If, then, it is true, and I have no doubt it is true, that English University education and English National education have accomplished in a remarkable degree the attainment of the aim and purpose of education as I have already defined, we may enter upon an investigation of the conditions which have contributed to that result, with a view to strive and create as far as possible those conditions in this country.

FAMILY LIFE AND HOME EDUCATION.

The first and foremost is the great influence of family life and home education. Family life constitutes a marvellous training ground for character, and parental authority and family discipline are the models of all authority and discipline in later life. The parental authority and family discipline in the homes of this country are a great influence, but it will be only when Female Education is properly advanced that home education will play its proper part in the training of the youth. From the family and home the next stage is the school. The immense influence on the formation of character and the future development and training of the intellect, of the great public schools of England cannot be over-rated.

PUBLIC SCHOOLS OF ENGLAND.

These public schools have been the nurseries of the great public men,—men whose names have descended to posterity,—men who have made for themselves an abiding place in literature, science and art,—men who have made the greatness of England in all departments of life. The great influence for good of these public schools consists not so much in the actual teaching there under-

taken, but in the enlargement of mind and vision that necessarily results from a large number of youths full of the energy, the enthusiasm, the sympathy, the keenness, the desire to know and question, that youth implies, being thrown together and thus developing new thoughts and ideas and forming habits of judging and acting from day to day. It is a pity that we have no counterpart in this country of those historic public schools of England, and, if our National Education is to attain the ideal formulated above, every effort should be made to found such schools in various centres.

From the school the youth passes into the College and the University, where, again, is pursued the same process of development of intellect and character by being brought in contact with young observant minds, and with professors and teachers not only of greater attainments and culture, but whose personal influence and example should always be a great source of inspiration to their pupils. Our effort should be to reproduce here, as far as possible, those conditions of University and College life. We must make the calling of teachers and professors properly respected, and, for that purpose, properly paid, and attract to it the best men available in England, as well as in this country. The great education of mind and character that results from contact with a Grant or a Wordsworth can never be supplied by the study of any number of books or the passing of any number of examinations.

ESSENTIALS OF NATIONAL EDUCATION.

Then we must realise,—and realise as clearly and as quickly as we can,—the fact that was so effectively brought out in a very suggestive and thoughtful article on "Essentials of National Education" in the *Bombay Chronicle* and was emphasised in his forcible style by my friend, Sir Frank Beaman, in his letter to that journal, that our education attempts to turn the mind into a receptacle instead of making it a serviceable tool. Under our system of examinations and courses of study, we are loading the memory with a mass of undigested knowledge; we require all things to be learned at once, not one well but many badly. We forget that mental over-feeding produces the same evil results that follow from physical over-feeding; just as physical over-feeding spoils the digestive functions of the body and leads to ultimate loss of healthy appetite, so mental over-feeding deteriorates the assimilating power of the mind and ultimately

destroys the natural desire for knowledge. *The Chronicle* truly observes: "As it is, the student simply cannot think, because all the time he is worrying to remember; so anxious is he not to let his disconnected facts escape his memory (like one who would run with his arms laden with oranges) that he has neither time nor energy to think about the subjects of his study, or to turn them over in his mind with enjoyment and satisfaction. We want versatile minds with power of initiative and originality, and the courage to think in independent channels, but we shall never have them while we overburden the memory and treat the mind as a receptacle instead of as a tool." I venture to urge that our courses of study and methods of teaching should be so remodelled as to remedy, and effectively remedy, this defect.

MORE EDUCATION OF EVERY KIND NEEDED.

We have often heard it said that Higher Education has been overdone in this country, that it was a mistake to encourage more young men to go into the Colleges and the University. If those who say so cared to study a few figures, they will realise how far from correct is their assertion. The total number of students at all the Colleges in the Presidency last year was only 5,330, while the total population is above 2 crores and 70 lakhs. The fact really is that we are very deficient in education all round, and that we want a great deal more of all kinds of education—Higher, Technical, Secondary and Primary. What a sad reflection it is to find that the proportion of literates in the whole country is 59 per thousand, and the proportion in this Presidency is 69 per thousand, that is, out of a total population of 2 crores, 70 lakhs and odd, 2 crores, 52 lakhs and odd are absolutely illiterate. While, in Japan which did not think of education at all till 1868, whose first Education Code was not framed till 1872, and whose first University was not established till 1877, that is, 20 years after the University of Bombay was established, every boy and girl on completion of the sixth year of age goes through a compulsory education course of 6 years. Dr. Fisher, the British Minister of Education, in his great speech in explaining the Education Estimates in which he asked Parliament to vote an additional expenditure of £3,500,000 on Elementary Education, said: "If any body had doubted the value of our Elementary Schools, that doubt must have been dispelled by the experience of the war. An immense army has

been suddenly formed out of Volunteers, and it has proved in a very short time a match at every point for the forces of the first Military Power in Europe. This Army was largely recruited from the Elementary Schools, and I venture to assert that so sudden and so brilliant a military improvisation could never have been achieved if we had been working upon the basis of a population entirely uneducated." Dr. Fisher also very forcibly insisted that the capital of a nation lies not in cash and goods, but in the brains and bodies of people. Just as a capitalist cannot afford to allow a large part of his capital to remain unemployed, a country can ill-afford to lose the potential energies of a large portion of its uneducated and undeveloped brains. Mr. Chancellor, imagine what would happen to a merchant or capitalist who allowed a large part of his capital to remain idle and unemployed. And yet that is exactly what we in India have been doing, with regard to nearly 95 per cent. of our brain capital. The State and the people must manfully rise to a proper conception of their duty in this matter of vital national importance, and be prepared to make large sacrifices for a proper discharge of that duty. We may well say with the poet—

O, for the coming of that glorious time,
When, prizing knowledge as her noblest wealth
And best protection, this imperial realm,
While she exacts allegiance, shall admit
An obligation, on her part, to teach
Those who are born to serve her and obey;
Binding herself by Statute, to secure
For all the children whom her soil maintains
The rudiments of letters, and inform
The mind with moral and religious truth,
Both understood and practised—so that none
However destitute, be left to droop,
By timely culture unsustained; or run
Into a wild disorder; or be forced
To drudge through a weary life without the help
Of intellectual implements and tools;
A savage horde among the civilized,
A servile band among the lordly free.

ADVICE TO NEW GRADUATES.

I am afraid I have detained you too long, but before I finish, I will say a word to my young

friends who have been admitted to the various Degrees this evening. You are now going out into life with hope and vigour and in the manner in which you realise your responsibilities to yourselves and to those around you will depend, in a great measure, the success that you will individually achieve and the further progress of your country. I am sure some of you in course of time will take leading places in the professions, the trades and industries of this City and Presidency and also in public life. On you will devolve the further carrying on of the work at present carried on by those who are striving for the advancement of the country. With the advent of important administrative reforms that are sure to follow on the readjustment of the Empire after the war, will fall upon you much greater responsibilities than former generations were called upon to bear, and it is expected of you to rise equal to those responsibilities. But whatever the sphere in which you may be placed, remember that it is your sacred duty so to shape your conduct as to proclaim yourselves worthy sons of this University. In conclusion, I advise you to cultivate self-reverence, self-knowledge, self-control, for Tennyson has truly said:

Self-reverence, self knowledge, self-control.
These three alone lead life to sovereign power.

Reviews and Notices.

A SIMPLE ALGEBRA FOR MIDDLE SCHOOLS, BY J. E. PARKINSON, M.A., I.E.S., VICE-PRINCIPAL, CENTRAL TRAINING COLLEGE, LAHORE. (K. & J. COOPER: BOMBAY). 14 as.

Mr. Parkinson has brought out a very rational treatise on Elementary Algebra. The book is intended only as an introduction to the subject which may safely be given in the earlier forms of our school course. Very often the teachers proceed with what may be called the more mechanical side of algebra even before the boys grasp the fundamental features of the subject. The school boy who thinks and says that -7 is greater than zero finds little difficulty in the factorisation of $3a^3 - 3ab^2$. This indulgence in gymnastic feats with algebraic expressions gives the boy a fatal facility in a few mechanical operations but in no way improves his

knowledge of algebra. The use of a book like Parkinson's in the earlier stages of the subject will give the boy a proper grounding which is sure to stand him in good stead during the later stages. The subject of negative quantities has always been a source of confusion to the pupils and the reason is not far to seek. The double significance of the symbol—(minus) which is not simply a sign of operation but also one of affection has to be clearly brought home to the pupil by means of numerous examples and exercises. A large number of graphical and practical examples has to be given to the class. Mr. Parkinson has recognised this very well and treated the subject in a clear and lucid manner. The teacher has to guard against attaching this double significance to the sign + also. It is rarely, probably never, used as a sign of affection although Mr. Parkinson now and then falls into that error unwarily.

TOLD THROUGH THE AGES SERIES: (1) STORIES OF THE SCOTTISH BORDER BY MR. AND MRS. WILLIAM PLATT—1917. pp. 256. Price 1s. 9d. (2) THE STORY OF THE FRENCH REVOLUTION, BY ALICE BIRKHEAD—1917. pp. 236. (HARRAP & Co.—AGENTS: P. T. I. BOOK DEPOT, BANGALORE). Price 1s. 9d.

We noticed in a recent number of this Review in terms of appreciation, two small books in the above-mentioned series, dealing with Robin Hood, and Stories from Thucydides, which we commended to all youthful readers. *The Stories of the Scottish Border* gives us a good idea of the many vicissitudes in the history of the English borderland which is so steeped in romance and wherein are to be seen relics of all the ages through which Britain has passed. The remains of the wonderful Roman Wall exist side by side with the gloomy castles of the mediæval Border Barons; and near by are winding river-valleys and delightful meadows where were fought the heart-stirring fights of Chevy Chase, Flodden Field and the rest. The romantic deeds and achievements of the Borderers have been collected and cast into enduring shape by Sir Walter Scott in his 'Minstrelsy of the Scottish Border.' This small book tells us in a story-like way of every stirring event that took place in the Borderland from the time of the wild Danes and Athelstan, 'the golden-

haired' grandson of Alfred, down to the age of Montrose, the Jacobite faction and the Fifteen, all of whom distinguished themselves in the Stuart cause. The Story of Johnie of Breadislee, the Lament of the Border Widow, the Life of Bold William, Belted Will the gallant Lord Howard, the Dowie Dens of Yarrow which has proved a source of inspiration to several poets including Wordsworth and the Story of Gilderoy of the Macgregor clan, less fortunate than his successor of the next century, Rob Roy—these and others are the descriptions of 'the characteristic products of ages whose standards and ideas were so different from our own, but for whom we all feel a very lively sympathy. The human and pathetic side of these border incidents is here brought into bold relief; and the reader is tempted, as he reads each story to echo the words of the author, "Splendid is the Border scenery, stirring are the Border ballads, but best of all are the Border men." The Border districts produce even now a hardy and fine race of hunters and sheep-farmers who are regarded as having sprung from the same vigorous stock which kept the Borderland lively a few centuries ago.

The Story of the French Revolution by Alice Birkhead is also interesting reading. The mind of the boy reader will be captivated by the way in which the court of the Sun-King Louis XIV is painted, the influence of Rousseau pointed out, and the events leading up to the conflagration of 1789 described. Mirabeau and Robespierre, the makers of the Revolution, are briefly described; and the fall of the Bastille, and the March of the Marseillais who first sang the song now adopted as the National Anthem of all Frenchmen, are dramatically and effectively told. The subsequent history of the Revolution leading to the fall of the Royalists, the guillotining of the King and the Queen, and the Reign of Terror which shed blood until it nauseated the public, are rather briefly described. The story is extended in point of time to the accession to power of Napoleon as First Consul; but in the latter part of the book that interest in the narrative flags. The illustrations are numerous and have among them reproductions of some of the most notable paintings of the Revolution scenes.

II. PAGES OF BRITAIN'S STORY (A D 597—1898) FROM HER HISTORIANS AND CHRONICLERS. EDITED BY J. TUNNELL. (OXFORD: THE CLARENDON PRESS.) 1917. pp. 325. 2s. 6d. net.

We have had occasion to review in our columns sometime back, Mr. Tunnell's 'Illustrations to British History,' which, though not a source-book in the strict sense of the word, tried to illustrate the various historical events and personages from contemporary literature. The manual now published may be taken as a supplement to it. And its object is the presentation of passages from the works of historians and chroniclers with a view to give life and interest to the study of history in our schools. As far as possible only the most valuable and enduring works have been made use of; and only those events and facts are illustrated which have got a definite bearing on the life of the people and on the important points of political and colonial history. We are specially gratified to find select and fairly long extracts from important but generally neglected books like Bede's *Ecclesiastical History*, *The Chronicle of Jocelin of Brakelonde*, Bishop Burnet's *History of My Own Time*, etc. The extracts are ample and sufficiently clear, though here and there explanatory notes might have been added with great utility. The modernised form of the Anglo-Saxon and mediæval books reads quaintly enough in our ears, and it is difficult for us to estimate how far the flavour and vigour of the original passages are lost in this process. The last extract about the study of history from Thackeray's *The English Humourists* teaches its own lesson. The book is bound to prove very useful to both teachers and students of our Colleges and the higher forms of our Schools.

QUESTIONS AND ANSWERS ON NATURE STUDY, BY B.A., L.T. (E. R. S. AIYAR AND BROS., NAGERCOIL.) Price 6 as.

This little booklet, as the author declares in his preface, is designed to help students to answer the questions on Nature Study in the S.S.L.C. Examinations of the Travancore State. Considering the dearth of books on this subject written by Indian teachers for Indian pupils, this little low-priced publication is a highly welcome.

We have to call attention, however, to the following points about the book in the hope that they would be mended in a later edition:

i. For sketches and illustrations the reader is, at every turn, referred to Pfeleiderer's book. No book on Nature Study will be sufficiently attractive or useful without copious illustrations of its own.

ii. As the questions and answers stand, only pupils who have completed a course of study previously can profit by it. But if the questions were sorted out under various heads, following the syllabus, they would be perused by pupils with profit as chapter by chapter of the course is gone through.

iii. It is difficult to state whether the author aims at highly technical knowledge or whether a general knowledge of nature is intended to be conveyed in this catechism. Some of the answers are full of such highly technical expressions as *ala spuriae* (p. 52) coxa, trochanter, femur tibia (p. 64); while other questions are loosely worded even to the degree of lacking in the accuracy of the information conveyed, e.g., 'Distinct species do not breed' (inter-breeding is meant) (p. 46). The grape, fleshy and indehiscent, and hence a berry—(this does not cover all the points of the definition of a berry) (p. 16.) Again speaking of the preparation of a culture solution (p. 10) 'to be dissolved in 100 grains of water (distilled water is meant.)

iv. Finally, the following statements require alteration to secure accuracy:—

(i) P. 9. *Mimosa pudica*—is styled 'Touch-me-not.' It is called 'sensitive plant' never 'touch-me-not' in any good book on Botany.

(ii) P. 20. The onion is certainly not the best specimen to be chosen as an example of storage of starch.

(iii) P. 43. Describing the bilateral symmetry of the Leguminosae, the author says that the line of symmetry cuts 'the smallest petal and the largest sepal.' This is true only of one sub-order of the Leguminosae, viz., the Caesal piniae. In the papilionaceae the line cuts the largest petal and the smallest sepal (if such a distinction exists). And in the Mimosae all the petals and sepals are equal in size.

(iv) P. 53. 'The nervures in the wings of insects are blood vessels.' They are really branching air-tubes.

(v) P. 53. The pigeon's sternum has a keel to help it to cleave through the air.

The main purpose of the keel is to afford attachment to the muscles that move the wings.

We, however, welcome this pamphlet as a handy aid to the student.

JESPERSEN'S SHORT ENGLISH GRAMMAR IN TAMIL, BY M. V. RAMANUJACHARIAR. 1917. (LONGMANS). 8 As.

This book serves to exemplify admirably the excesses that advocates of the direct method of teaching languages are guilty of. At the very start however, it may not be out of place to mention that the person who in penning these lines appropriates to himself the journalistic 'we' is as ardent an admirer of the direct method as ever drew breath, has had himself to apply it in the lower classes and has also had experience of teaching English to students of one of the premier Colleges of this Presidency. If we could have had a pre-possession at the start, it must be plain, therefore, that it must have been entirely in favour of the book that we are now reviewing. But we do not find it possible to welcome it. We confess to an inability to realise that the book has any useful purpose to serve. Jespersen's English Grammar was long buried, to English and Indian eyes, by being written in the Danish language, and it was indeed necessary to bring it out in English. We wonder, however, why an edition in Tamil should have been thought of. We have not seen the Telugu edition that Mr. G. V. Ramamurti seems to have been responsible for; but to our mind the Tamil edition has not made out any case for any Vernacular editions for use in India. Except the few pages that deal with the pronunciation of English speech-sounds, we cannot admit that any portion of the book was required in Tamil. The transcription below of two sections which we believe are typical of the book will enforce the point of our remarks.

"§ 53. Compound மொழிகளுக்கும் word group களுக்கும் இறுதியில் apostrophe யும் 's' உம் சேர்க்க அவைகளுக்கு genitive உண்டாகும். உ—ம்: My brother-in-law's son. The Queen of England's power. Somebody else's hat.

"§ 94. Relative ஆக வரும் what உக்கு that which என்று பொருள். இது principal clause இன் ஒரு பாகமாகிய that உம் subordinate clause இன் ஒரு பாகமாகிய which உம் சேர்க்கு ஏற்பட்ட ஒரு மொழி. உ—ம்: I give him what (that which) I had. You (= one) could not understand one word of what you heard. You must attend fully to what you are about. You are exposed to death, and what is worse, to torture. இங்கு what என்பது பின் வரு வதைக் காட்டும்."

If the book is intended for the taught we wonder if there is any need for exposition of this kind in Tamil for the benefit of boys who are advanced enough to understand and handle English sentences such as those introduced in the book. Much less, therefore, is the need of the book for the edification of the teachers in charge of pupils so far advanced.

It is a pity that a number of English phrases and words that could have been aptly rendered into Tamil have been allowed to stand. The identification of *ψ* with the sound in 'vision' by one who has been trained into a knowledge of English phonetics by no less an enthusiast than Mr. J. A. Yates himself is proof of the elusive nature of that Tamil sound. We cannot fail to regret Mr. Ramanujachariar's transliteration of the word *English* into இங்கிலிஷ் in Tamil.

While we are happy that a Tamil scholar of the type of Mr. Ramanujachariar has acquainted himself with modern methods of linguistic study and teaching we cannot help expressing—especially in view of the great paucity of workers in that language,—the wish that he had turned this knowledge to the elucidation of the mysteries of his own language, Tamil, of which he is an undoubted master.

BURKE'S SPEECHES ON AMERICA: EDITED WITH INTRODUCTION AND NOTES, BY F. A. CAVANAGH, M.A. 1915. (BELL'S ANNOTATED ENGLISH CLASSICS).

This is an annotated edition of Burke's Two Speeches on American Taxation and on Conciliation with America. The Government of India which is anxious to prevent students having anything to do with practical politics will do well to request Messrs. Bell not to offer for sale in India this book, the teachings of which are applicable to modern Indian conditions almost in their entirety. The University of Madras may well be trusted, of course, not to prescribe this for any of its courses of studies.

It is a pity that the notes should contain such a sentence as the following:

'He used the most violent language, calling Raleigh, e.g., "the rufest traitor in all England," "a monster with an English face and a Spanish heart," "a spider of hell," and the like.'

THE TEACHER'S BOOK OF MUSIC FOR INFANTS, BY CLARA E. GRANT (EVANS BROTHERS: LONDON). Price 1s 6d. net.

This is a necessary addition to every Infant School library. It consists of the old familiar nursery rhymes set to music with simple actions given for each song. Singing like all other subjects should receive very careful attention in the Infant School, but it is very necessary to remember that spontaneous expression of the child's own nature in

rhythm and song is the primary aim rather than elaborate technique and formal "results." The book is well got-up, the printing of both the words and music are clear and large and the paper is good. It might be mentioned that a translation of these songs into vernacular would be useful and would help the Indian school teacher more than if the present book were purchased by him.

THE BOOK OF SCHOOL GAMES, by C. E. HODGES, M.A.,
(EVANS BROTHERS: LONDON). Price 3s. 6d. net.

It is not necessary in these times to write at length in defence of games, or to point out their value as a training factor. In this book the best games of all generations and peoples have been collected and put together in such a way that the most backward teacher will be able to see their value and, we hope, adopt them, for not only their boys but also for their girls. The book would be a valuable addition to any school library.

PUBLICATIONS RECEIVED.

Sky and Weather, by M. Ramabrahma, B.A., B.T.,
Dharwar. 8 as.

The Yet Remembered Ruler of a Long Forgotten
Empire, by Prof. S. Krishnasami Aiyangar, M.A.,
Madras. 8 as. (Reprinted from the *Hindustan
Review*.)

Student's History of British Rule in India (1757—
1857), by C. B. Abuvale, B.A., and N. B. Abu-
vale, B.A. Ghelabhai Mansions, Bombay. Re. 1-12.

Civics (Tamil), by M. K. Sundara Varadachari, B.A.,
Perambur: Ganapati & Co. Re. 1.

A Class-Book of Organic Chemistry, by J. B. Cohen,
Ph.D., B.Sc., F.R.S. London: Macmillan. 4s. 6d.

Carlyle's Signs of the Times and Characteristics,
edited by R. D. Rapade, M.A. Bombay: Oxford
University Press. Re. 1-12.

Graded Bible Lessons, by A. C. Clayton. Madras:
C.L.S. 5 as.

Evolution and Christianity, by Rev. H. Peckenham
Walsb. Madras: C.L.S. 6 as.

Readings from Indian History, Part II, by R. Ethel
Sykes. Madras: C.L.S. Re. 1-8.

Jespersen's A Short English Grammar translated
into Tamil, by M. V. Ramanujachariar, Madras:
Longmans. 8 as.

Stories in Verse, selected and edited by V. H.
Collins, M.A. London: Milford. 1s. 6d.

Moral Reader No. 1, by M. V. Srinivasa Aiyangar,
B.A. Madras: A. Venkatachala Aiyangar.

L. Besse's A Grammar of High Tamil with the
English Translation of B. G. Babington, M.C.S.
Trichinopoly: St. Joseph's Industrial Press.
Re. 1-8.

Indian Educational Notes.

MADRAS.

C. R. C. High School Teachers' Association, Pursawalkam.—The inaugural meeting of the Pursawalkam C. R. C. High School Teachers' Association, Madras, was held in the school-hall at 5-30 P.M. on Thursday, 6th September 1917. M. R. Ry. A. Tiruvengadatha Aiyangar, B.A., L.T., introduced the lecturer M. R. Ry. Rao Bahadur K. B. Ramanatha Aiyar Avl., M.A., B.L., L.T. to the audience, as a gentleman well-known in educational circles on account of his having laboured hard for the betterment of the teachers' status. The lecturer then delivered a very instructive address on 'Good work and happy workman.' The following is a summary of his remarks: "In every walk of life there is a close connection between well-doing and well-being. The teachers' profession is no exception to the rule and therefore any teacher that attempted to discharge his work satisfactorily will also find it possible to lead a really happy life. There are some essential characteristics which every teacher ought to possess. 'The ideal teacher would gladly learn and gladly teach,' is an oft-quoted line which brings home to us the necessity for keeping our minds well-informed. The true teacher should take a vivid interest in the live material entrusted to his charge. While thus school-masters should strive hard to maintain themselves at a high level of efficiency it is also the bounden duty of the managers and authorities to ensure for them a happy home and an enthusiastic frame of mind which can be attained only when they are freed from the domestic troubles and other hardships consequent on poverty. If the teacher were paid suitably, even if not handsomely, it would rarely be necessary for an elementary school-master to covet the position of a cook, nor for a secondary grade teacher that of a motor-chauffeur, nor again for a graduate L. T. that of a second grade Vakil. The authorities have to note that while the cost of living has nearly been trebled during the last decade, the teacher's emoluments have not proportionately increased. They have also to appreciate the considerable change brought both in the quality and quantity of the teacher's work. Any member of the profession at the present day has to teach for four full hours every day at school and to spend at least an equal period at home on preparation. He has again to keep pace with advanced ideas on educational topics by constant study and mutual discussion. The school-master is therefore richly deserving of a considerably enhanced salary and it will be the duty of the managers and the Government to give their sympathetic consideration to the subject."

The meeting terminated with a hearty vote of thanks to the learned lecturer.

The Educational Review.

In view of the unmistakable tendency observed in various Indian Universities. quarters to under-rate the achievements of the present Universities in India, the last Convocation Address* of the Bombay University by the Hon'ble Mr. C. H. Setalvad will be welcome. He entered into a spirited defence of the Universities in India and protested against any attempt at revolutionising them. Defects undoubtedly existed, as in all human institutions, but their progress in the past entitled them to some special consideration. "They had been repeatedly told," said Mr. Setalvad, "by some candid friends that the work of the University had been a dismal failure, that their system of University education and examination was a delusion and a snare, that their colleges were nothing more than factories for cramming. He would ask these pessimists to look at the products of the Universities who in all grades of public work were serving the State with conspicuous ability and integrity,—to look at the medical graduates who were giving medical relief and help to their fellow-countrymen in the towns and villages of the Presidency and graduates in law who were following the exciting profession of law maintaining the high honour and tradition of their class and architects and engineers that were ministering to the sanitary housing of the population of large cities and

above all he would ask them to look at the love of education, the spirit of self-sacrifice, and the sense of duty to educate their fellow-beings that had been stimulated and had found active manifestation." It must not be forgotten that the Universities in India have done immense work in the past; they are discharging responsible functions at the present time and they are undoubtedly transforming and equipping themselves for wider and richer work in the future. One cannot but condemn the cheap sneering criticism that has been hurled against our Universities, in vague enthusiasm for educational centres of a nobler type. A vast and varied network of colleges having been established all over the country, we could no more uproot or revolutionise them if we would than we could start afresh, though they should be developed and improved upon. That the Indian Universities have not fulfilled all the hopes entertained of them when they were established may be a fact; that Indian degrees do not always connote such a high standard of scholarship as we would like may also be admitted. But as the *Times of India* pertinently asks, what Universities in the world have fulfilled them absolutely, what scorn has not been poured on the exceedingly modest standard of educational attainment represented by the Oxford and Cambridge Pass degrees? How many critics have assailed the London degrees on very much the same grounds as the Indian Universities have been found wanting? But no one pro-

* Published elsewhere in this issue.

poses that for these reasons Oxford and Cambridge should be revolutionised or that London should be scorned. If we are to make any effective educational progress in India we must take the complex and very valuable educational machinery as we find it, improve and develop it by all means in our power and supplement it perhaps on quite different lines where it does not meet Indian needs which had not developed in the early days of our Universities. That is quite a different thing from decrying everything associated with our educational system and confronting the future in a spirit of revolutionary pessimism; we want rather resolute courage and optimism. We hope therefore that in relation to our Universities we have heard the last of this kind of barren and destructive criticism and that on the strong and extensive foundations which exist to-day we shall proceed to rear a more splendid structure.

The Conference summoned by H.E. the Viceroy to consider the problems of English teaching in Secondary Schools has met and dispersed, but we are not sure if its deliberations are going to result in any definite change of educational policy. Amidst the varied and conflicting opinions expressed on the subject it should be difficult to frame any definite lines of new action. The want of conclusiveness which characterised the proceedings of the Conference of Directors of Public Instruction held some time ago,

seems unfortunately to taint this Conference also and we confess to a feeling of scepticism as to its value. But the views of a large number of members of the Conference must have come as a shock to those who believe in the absolute desirability of using the vernaculars as the medium of instruction in Secondary Schools. The opinion was expressed that experiments in the direction were not attended by any encouraging results and schools in which they had been made did not show better and more accurate information on the part of pupils than others. It is also significant that a large number of members should have been of the opinion that English teaching should begin even at an earlier stage than at present. We feel that the proceedings of this Conference will lead to a re-examination of the question of imparting education in the higher stages of Secondary Schools through the media of the vernaculars.

We welcome to the ranks of Indian journalism the *Indian Philosophical Review** that has just begun to be published under the auspices of the Indian Philosophical Association of Kolhapur. It is probably a striking testimony to the liberality of present-day tendencies in India that the Association should have been started with the active support of the head of an orthodox Hindu Mutt, Pandit Lingesa Maha Bhagavat, the Sankaracharya of Kolhapur. The Review

* Oxford University Press, Bombay.

is devoted to a fair and impartial criticism of problems of religion and philosophy and is under the editorship of two professors of the subject in Western India, Prof. A. G. Widgery, M.A., of the Gaekwar's College, Baroda, and Prof. R. D. Ranade, M.A., of the Deccan College, Poona. We hope that the new journal will serve to give a strong impetus to the advancement of philosophical studies in India.

It is with a feeling of pain that we have noticed some recent attempts in Southern India at involving students in political agitation. At numerous educational centres, students have been thoughtlessly encouraged to take into their own hands an obstruction to the Government's recent circular on Students and Politics. The circular has been condemned on all hands at least in so far as it relates to the prohibition of even simple attendance at political meetings, but it is not for those engaged in their education to take upon themselves the duty of correcting such errors on the part of Government. The peaceful life of many a college and school has been disturbed as a consequence and we have a state of tension and excitement which is thoroughly inconsistent with the pursuit of knowledge. Meetings of protest, memorials, and even strikes have unfortunately become the order of the day in a Presidency which has always enjoyed a well-deserved reputation for academic sobriety. As its consequences are likely

to be disastrous in the sphere of education, it behoves educationists and guardians of students to combine in strenuous efforts at creating a better order of things.

The Patna University Bill has passed into law and India will have not only a University added to its list but also thus possess one of a more liberal type. Reference has been made from time to time in these columns to the gradual and agreeably surprising transformation of a narrow measure conceived by the bureaucratic taste of Sir Harcourt Butler into that of a catholic and democratic one as shaped by the present Indian Member of the Imperial Council, the Hon. Sir C. Sankaran Nair. The plaudits of praise with which the passing of the Bill was welcomed by the non-official members of the Imperial Council must give satisfaction to all those interested in the progress of higher education in India. We have only to add that the liberal spirit pervading this measure ought to leaven up the older Indian Universities also, as they might be expected to take upon themselves even more onerous responsibilities than their youngest sister who is now to open her eyes in the purlieus of Bankipore. In view also of this generous treatment of the people of Behar a heavy responsibility rests upon their shoulders to make the new University such a success as not to give the least scope for carping critics. We hope the Patna University Act marks a new epoch in the evolution of Indian Universities.

response of plant-life he has now endeared himself to the country by a brilliant act of self-sacrifice, by the offer of a sum of five lakhs of Rupees, the hard-earned savings of a Professor's life for the establishment of the Institute. The estimates do not smack of official extravagance with its piles of buildings and a highly-paid European staff, for, a sum of fifteen lakhs of Rupees including Sir Bose's own contribution is all that is asked for. With the University Science Institute founded by the liberality of two illustrious sons of Bengal, the late Sir Tarak Nath Palit and Sir Rash Behari Ghose, and the Society for the Advancement of Scientific Research, Calcutta, offers very good scope for the establishment of such an Institute. There is also the unique advantage in the city of the existence of a large number of scholars who have already made a reputation for themselves in the realm of science. Initiated under entirely Indian auspices, worked with the country's talent and financed, to start with, by the liberality of an Indian who is an eminent scientist himself, the Institution will combine several remarkable features and is bound to be a success. Writing on this subject we cannot but draw attention to the pathetic contrast presented by the City of Madras where the higher aspects of University life do not seem to show any recognition of pursuits other than pecking at the dry bones of philology or rummaging the musty files of antiquarian record. When will Madras learn a lesson from Calcutta?

By a curious irony educated opinion is finding it necessary in England to plead for a wider recognition of the teaching of English in schools and colleges. The learned Registrar of the London University, Mr. P. J. Hartog, startled the English-speaking world some years ago by gravely stating at the beginning of his suggestive book on *The Writing of English* that the average English boy is not taught to read and write his language with any degree of efficiency. During the last few months a writer of considerable ability has been pleading in the columns of the *Educational Supplement of the London Times* for a wider recognition of the claims of English. He rightly lays emphasis on the importance of teaching composition in schools and the remarks apply with equal justification to conditions in India where the language is also in official and current use. "We teach boys and girls," he says, "to compose in order that in their lives they should be able to give record or send message. The policeman needs to give terse record of facts ascertained, stressing that which needs stressing, cutting out all irrelevant matter and personal opinion not supported by fact. The officer and the non-commissioned officer also must give record or send clear instruction. The businessman must be able to put a case clearly before his correspondent, to report accu-

The re-discovery of English.

SEP. 1917.]

tately a conversation." Among the numerous problems presented by English teaching in India there is probably nothing more bewildering than the teaching of composition in the language and so long as it does not receive more attention than in the past the progress of English studies cannot be very sound.

It will be conceded on all hands that the financial status of the teacher in India is very much worse than that of the teacher in England and when we find that the improvement of the teacher's salary is in the front of the educational reforms advanced to-day in England, the need for an agitation in India on the same lines should become apparent. Times without number the plodding members of the neglected profession have been treated to dreary rigmaroles on the nobility of the teaching profession and the need for sacrifice on the part of those who enter it, all this appreciation never expressing itself in any attempt at the improvement of his material conditions and giving him a higher status in the social life of the land. To such preachers of the ideals of self-sacrifice to members of a profession other than their own, some recent remarks of the *London Times* furnish a striking answer:—"Education owes an enormous debt to missionaries but it cannot live upon them; and the notion that a teacher should be satisfied with apostolic

poverty and a belief in the nobility of his calling is a thoroughly bad notion and a fatal obstacle to educational progress." Every one will be prepared to agree with the view that we have reached a point at which people talk at any rate freely of attracting young persons into the teaching profession and are prepared to go to all sorts of length in persuading children to promise that they will become teachers when they grow up; but we have not reached the point of providing the teacher, when he or she has grown up with the sort of prospect that any capable energetic man or woman ought to look upon as adequate. We find that at the last Conference of the South India Teachers' Union a committee was appointed to consider the question of post-war educational reform in India and we hope that this item so essential for the progress of education will be pressed on the attention of the authorities with all the emphasis at its command.

The high and varied scholarship and the keen interest in education of Lord Bryce on Study. entitle any views of his on intellectual matters to very great respect. In his presidential address at the last annual meeting of the British Academy before relinquishing his chair, Lord Bryce surveyed some of the fields in which the work of the Academy is likely to lie in the next twenty or

thirty years. In the department of history, he suggested as one of the questions which investigated more investigation, the influence on racial character, an aptitude of environment and especially of contact with other peoples' as compared with the inherited quality of the race. Such observations as he had been able to make among the non-European peoples had led him to doubt whether we are not apt to exaggerate the importance of heredity and physical environment, to under-estimate the value of the contact of races for each of them and to allow too little for the social and political conditions under which a race or people had lived it might be thousands of years. He also spoke of the value of newspaper files for historical purposes. They were a priceless record but they had serious defects as a reader could not learn from them the real qualities, perhaps not even the real aims, of the leading political figures. In the department of philology he mentioned three practical problems which claim attention. One was the reform of the spelling of English, the second, the possibility of adding to our alphabet a few letters appropriated to sounds now ill-covered by the existing letters, and the third was the problem of a universal language for purposes of travel. In the region of economics many of the propositions which forty years ago were thought most firmly established were now confidently assailed and some seemed shaken to their foundations. Obviously there was plenty for the economists of all nations to do. Dealing with the study of international law. Lord Bryce said, the events of the last few years have shown that much of its contents needs to be built up again *de novo* and that if a new system is to command respect and obedience some means must be provided for enforcing such rules as the nations of the world may agree to adopt. The world had to provide against the recurrence of such calamities as are now disgracing and destroying civilisation and address itself to the means to be adopted for securing a permanent peace, to be guaranteed by the action of free peace-loving peoples.

The Educational Review

A Monthly Record for India.

VOL. XXIII.

OCTOBER 1917.

No. 10.

All literary contributions, books for reviews, newspapers or magazines, sent in exchange, &c., should be addressed to the Editor, No. 4, Mount Road, Madras. Articles and communications intended for publication in the succeeding issue should, as far as possible, reach the Editor not later than the 20th of the month. The Editor solicits contributions on all subjects of educational interest. Stamps should accompany the MS., if the writer wishes it returned, in case of non-acceptance. The Editor can in no case hold himself responsible for accidental loss.

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DANTE GABRIEL ROSSETTI.

THE PRE-RAPHAELITE PAINTER-POET.

I

DANTE GABRIEL ROSSETTI, born in 1828, was an Italian more than an Englishman by birth, being on his father's side wholly Italian, and on his mother's side half-Italian and half-English. But his life and work he identified with the land of his birth and loved through life to render his services to the British Muse. Rossetti called himself "a British Poet" in one of his letters to William Allingham.

The Rossetti family came to be so called owing to their "florid complexion and reddish hair." The family, which during the days of Gabriele Rossetti, the poet's father, settled in England, was "one of marked characteristics, with strong literary and artistic gifts." Gabriele Rossetti was a close student and a distinguished commentator of Dante. He was ever fond of mystical specu-

lations. Rossetti inherited this trait from him. The father's indulgence in declamatory political talk created an aversion for politics in the son, who became "a nonentity in any practical relation" to political matters, though he always liked enlightenment, justice and mercy in public affairs. The father's over-zeal in politics made the son realise early in life "the momentary momentousness and eternal futility of many noisiest questions." Rossetti's mother was a cultured woman, very simple in habits and affectionately devoted to the family. Rossetti almost worshipped her, for whom he always possessed a "fondling love." Rossetti's liberal training in religion was due to this sternly religious lady. Rossetti's elder sister Maria Francesca was a very practical and exceptionally devout lady, who has left an adequate memorial of herself in "A Shadow of Dante," a manual highly valued by scholars. Rossetti's only brother William Rossetti, a fine critic and a good poet, is known to us as "his brother's careful and accomplished biographer." He was the Secretary of "The Pre-Raphaelite Brotherhood."

¹ Letters to Allingham: Let. XV. p. 92.

² Memoir: Family Letters. Vol. I.

³ English Men of Letters: Rossetti. p. 6.

and the Editor of "The Germ." He exerted a unique influence on the development of the genius of Rossetti and was a constant companion of Rossetti to the very end of the latter's life. Rossetti's younger sister Christina Georgina holds a place in literature, which is at least equal to that of Rossetti himself. Her works are in some respects even more interesting than those of her brother. She was characterised by pure and high devotion and absolute simplicity. Her sonnets are exquisite and "her best examples rival her brother's."¹ Rossetti held that she was superior to Miss Proctor and Mrs. Browning and the "Fraser" of August 1864 gave her "the palm among living poetesses."² Rossetti's aunt Charlotte Polidori must be mentioned, for to her Rossetti "had much reason to be thankful for liberal assistance afforded to him at contingencies when he should otherwise have been in straits,"³ and his "artistic career" might have been "incalculably retarded, if not altogether frustrated."⁴

Rossetti was thus fortunate in his family surroundings and he felt he was always encouraged and loved. Rossetti was equally fortunate in his social and literary environments. Their household, says Rossetti, was "all of Italian, not English environment." He lived in daily intercourse with Italian patriots, artists, literary men, musicians and others of whom his brother mentions more than fifty, including Paganini, Mazzini and Panizzi.

Even in early childhood Rossetti showed great love of literature and was in his father's words "born with a decided aptitude" for painting, so much so that even from his earliest years, he inspired high hopes in the family, that he would "prove a great painter." At four he drew his rocking-horse. At seven he made a number of

drawn and coloured figures to illustrate "Henry VI." He drew on many chivalric subjects, the modern and the antique not attracting him. When he was fourteen, he sent "The Cavalier" drawing to his aunt, saying that it was "pronounced by every one to be the best figure I have ever drawn."

Early in life, under the training of his mother, he learnt to regard the Bible as the greatest and sublimest book in the world, especially loving *Job*, *Ecclesiastes* and the *Apocalypse*. Shakespeare's "Hamlet" stirred his soul when he was but four. By ten he had got the acquaintance of Shakespeare, Scott, Goethe, and delighted in "The Arabian Nights" and a host of mystic works and ancient ballads. By fourteen he had drunk deep of Ariosto, Hugo, Shelley, Byron, Keats and Browning, for the last of whom at one time he had such high regard that his brother was afraid that he might do in art what Browning did in poetry and might even base his art and poetry on the genius of Browning, but for his independence and originality. But Rossetti's "intellectual life was nurtured upon fancy and sympathy not upon knowledge or information."⁵ It may be noted, however, that Dante was not Rossetti's favourite poet until "growing older" he was drawn within the circle, at the age of fifteen or sixteen.

Rossetti's school education comprised on the whole less than six years, during which he read at Mr. Paul's School for one year and at the King's College School for the rest of the period. He never mixed freely with his school-fellows and abstained from all games. Hence his desultory habits and lounging and lolling about "like a seal on a sandbank" as Smetham put it. But even when he was at school, Rossetti earned a name for "being addicted to drawing or sketching."

Immediately on his leaving school, he launched "into the definite study of pictorial art" with

⁵ Memoir: Fam. Let. Vol. I, p. 83.

his father's permission. First he attended Cary's Institute, stayed there till July 1846, when he went to the Royal Academy, where he never passed beyond the Antique School. Rossetti says that "what he ought to do" is always what he "can't do." This impatience of imposition and the love of spontaneity, which form the characteristic marks of a genius drove Rossetti from Cary's to the Royal Academy, when he thought that Ford Madox Brown, with whom Rossetti now made a life-long friendship, consequent upon his admiration of certain pictures by Brown, would not set him to "paint pickle-jars." When Rossetti proceeded to the Academy, "fame of a sort had preceded him from Cary's." He was already known to be a clever sketcher of chivalric and satiric subjects. Rossetti was not therefore satisfied when Brown did not show him the "royal road" to Painting for which he "now yearned. A person who wrote to his mother when he was fifteen years old, on visiting the Westminster Exhibitions of 1843, 1844 and 1845, that "high art and high talent were not confined to the continent," that "British art was not falling" as was held by some since "all the successful competitors are young men," could not be a student for a long time, and Rossetti therefore, soon escaped from the cage of the Royal Academy School, and flew in perfect liberty into the wide unbounded atmosphere of inventive and creative art.

Forming now a life-long friendship with "a circle of young men inspired by new ideas in art, by a resolve to abandon the conventionalities inherited from the 18th century and to revive the detailed elaboration and mystical interpretation of Nature that characterised early mediæval art,"¹ impelled by the advice of Leigh Hunt that Painting would make him rich, while Poetry "is not a thing for a man to live upon while he is in the flesh, however immortal it may

render him in spirit," and compelled by the circumstances of the family, Rossetti decidedly entered the lists as a painter, and with the co-operation of Holman Hunt and Sir John Millais started "the Pre-Raphaelite Brotherhood" in 1848.

This movement which "all but revolutionised art"² was soon ridiculed, so that it died in less than three years after it was set on foot. Exactly that which was the strong point of the movement in Ruskin's eyes became the cause of envy and hostility to the jealous and incapable critics. Ruskin asked boldly "whether even the greatest men of old times possessed more exhaustless invention than either Millais or Rossetti." His plea that at the date when the Pre-Raphaelites exhibited their pictures, Millais was of the exact age at which Raphael painted the *Disputa*, his greatest work, that Rossetti and Hunt were both of them older still and that there was not "any one member of the body so young as Giotto, when he was chosen from among the painters of Italy to decorate the Vatican"³ is certainly enough to show that the movement was worthy of the "big boys" who started it.

Woolner, Collinson, Stephens and W.M. Rossetti were taken in as members of the Brotherhood, the last holding the office of Secretary. But the work and later influence of the movement entirely belong to the trio who conceived it and started it at the first instance, on the firm basis of "serious and elevated invention of subject along with earnest scrutiny of visible facts, and an earnest endeavour to present them veraciously and exactly"⁴ and holding for their objects:

- (1) to have genuine ideas to express,
- (2) to study Nature attentively, so as to know how to express them,

¹ J. Knight: Great Writers: Rossetti.

² Ruskin: Addenda to Lectures on Architecture and Painting.

³ Memoir: Fam. Let. Vol. I.

⁴ Dict. of Nat. Biog: Rossetti.

¹ Memoir: Fam. Let. Vol. I.

² The author of this contribution has published a separate essay on "Christina Georgina Rossetti."

³ Fam. Let. Vol. II, p. 84.

⁴ Fam. Let. Vol. II, A-8.

(3) to sympathise with what is direct and serious and heartfelt in previous art, to the exclusion of what is conventional and self-parading and learned by rote, and

(4) most indispensable of all, to produce thoroughly good pictures and statues.

The origination of the movement was due to the feeling in these men that the English School of Painting started by Hogarth had degenerated in the hands of Wilkie, Leslie and Mulready, that conventional optimism and trivial humour had taken the place of Naturalism in Art, and that the English School in 1848 was therefore wishy-washy in the highest degree. The name "Pre-Raphaelite" was adopted by them not with the idea of imitating the painters who preceded Raphael, for then, "the art would have ceased to have the slightest interest for any one of the three painters concerned" as Hunt put it, but in admiration of their manifest emotional sincerity, and strong evidences in them of grace, decorative charm, observation and definition of certain appearances of Nature and patient and loving, but not mechanical labour. Since the members of the Brotherhood found themselves in a short time to be developing each in his own direction, and scattered, "the whole Round Table" was dissolved, even as

"rivers merge in the perpetual sea,"

even as

"—luscious fruit must fall when over-ripe."¹

The Pre-Raphaelite movement was not purely an art movement, but was also a literary one. This movement formed the third stage in the Romantic Revival in England. Its chief notes were a generally, though not universally, mediæval tone of thought, colour and in part, subject, with, in method, a still further elaboration of the two appeals to imagination—by the way of exact and vivid visual presentation and by that of subtle and varied musical suggestion

of sound—which had been so largely carried on by Tennyson, and to some extent originated by Keats.² That the Brotherhood had the aim of developing such ideas as were suited to the medium of Fine Art, and of bringing the arts of form into general unison with what was highest in other arts, especially poetry, was borne testimony to in the short-lived periodical, named "The Germ,"³ which, started in January 1850 after passing through four numbers, was consigned to answer the curiosity of a literary antiquarian of a future age. This was projected and started at the instance of Rossetti, who "was eager to distinguish himself in literature, no less than painting, and wanted to have some safe vehicle both for ushering his writings before the public, and for diffusing abroad the Pre-Raphaelite principles in Art."⁴ The principles of the Pre-Raphaelite movement were thus enunciated by its editor, W. M. Rossetti:—

"When whoso merely hath a little thought
Will plainly think the thought which is in him,—
Not imaging another's bright or dim,
Not mangling with new words what others taught
When whoso speaks, from having either sought
Or only found,—will speak, nor just to skim
A shallow surface with words made and trim,
But in that very speech the matter brought
Be not too keen to cry—"so this is all!—
A thing I might myself have thought as well,
But would not say it, for it was not worth!"
Ask: "Is this truth?" for is it still to tell
That, be the theme a point or the whole earth,
Truth is a circle, perfect, great or small!"⁵

and in the first number of the journal thus:—
"The endeavour held in view throughout the writings on Art, will be to encourage and enforce an entire adherence to the simplicity of Nature, and also to direct attention as an auxiliary medium, to the comparatively few works which

¹ Saintsbury: Hist. of Eng. Lit. p. 779.

² "Art and Poetry"—was the name adopted for Nos. 3 and 4.

³ Memoir: Fam. Let. Vol. I. p. 150.

⁴ Title-page of "The Germ."

Art has yet produced in this spirit." This official manifesto or apologia of Pre-Raphaelitism had for its object to preach the noble doctrine of the sacredness, the saving grace of conscience in Art.¹

The "Germ," having been started without stock of either matter or capital—of nothing but faith, in short, when the indignation of opponents became fiercer and made itself heard through the press, died, but not without making itself heard. Hunt, in describing the end of the journal, says that "the unpunctuality of so important a contributor as Rossetti made it impossible to go on." The fact that these few pages, then carelessly thrown about, are now valued very highly and fancy prices are paid for them, shows that Tupper, the painter of the journal, was utterly wrong when he said that they "wrote them never to be read."²

From 1849 to his father's death in 1854, Rossetti's history was one of steady progress, his *Mary's Girlhood* and *Eccle Ancilla Domini* having given him repute "much more than most young men have gained upon the strength of two small pictures."³ In 1853 he designed his great picture "*Found*," which remains incomplete to this day, but before this Rossetti had turned to poetry and written some of his finest pieces, like "*Sister Helen*," "*The Bride's Prelude*," "*Dante at Verona*," "*A Last Confession*," "*Jenny*," "*The Burden of Nineveh*," etc., in a short time, again abandoning Poetry and adopting Painting as his profession for life.

It was in the year 1850 that Rossetti came across "the noble glorious creature," Elizabeth Eleanor Siddal, whose face occurs in several of Rossetti's pictures after this date. With this quiet, self-possessed girl, whom Rossetti met at a sempstress's shop, who "had the look of one

who read her Bible and said her prayers every night, which she probably did," as Madame Belloc said, Rossetti fell deeply in love, struck with her unworldly simplicity and purity of aspect, her beautiful coppery-golden hair, her brilliant complexion and tall stature, and a definite engagement was formed between them in 1851. Of her, said Ruskin, "she cures you of all your worst faults when you only look at her," writing to Rossetti in 1860.

Rossetti's definitely turning to Painting, after some hesitation, was in the main due to Ruskin, the literary Apostle of 19th Century Art, whose "mood to make Rossetti's fortune" and whose generous offer to buy his pictures freely, gave the spur to Rossetti in his labour with the brush and the palette. A very intimate friendship was at once formed between Rossetti who was conscious of Ruskin's high prestige and Ruskin who considered Rossetti to be "the chief intellectual force in the establishment of the modern Romantic School in England." Ruskin's generosity was also extended to Miss Siddal, in the same manner as to Rossetti, but the arrangement was soon broken up owing to the inability of Miss Siddal to produce her works regularly on account of her ever uncertain state of health. The friendship between the two eminent men, however, slowly died away, since the intensely individual nature of Rossetti could not long brook the self-asserting criticisms of Ruskin. This episode is interesting for another thing. During this period, Rossetti influenced by Ruskin worked for a while in the Working Men's College as a teacher, where he asserted the Pre-Raphaelite principle of Art and set his pupils to draw direct from actual models placed before them.

The short sojourn of Rossetti to Oxford in 1855, for the work of painting some pictures on the walls of the Oxford Union Debating Room, is interesting, for he there gained the friendship of Burne-Jones, Morris, and especially of Swinburne, "the greatest figure in our poetical liter-

¹ Encyc. Brit.: D. G. Rossetti.

² The *Dirge* composed by him. Memoir: Fam. Let. Vol. I. p. 156-7.

³ Fam. Let. Vol. II. A. 9. p. 99.

¹ Christina Rossetti: "To the P.R.B." 10th Nov. 1858.

ature since the advent of Tennyson and of Browning."¹ The semi-public exhibition held in 1857 of the works of Rossetti and others, and hence called "The Pre-Raphaelite Exhibition" served to confirm the impression that something was still going on in the country very different from what could be seen in the ordinary picture-shows.

On May 23rd, 1860, the marriage between Rossetti and Miss Siddal, was solemnised at St. Clement's Church, Hastings, after a long postponement owing to Rossetti's pecuniary difficulties and the "constantly failing state of her health." In a letter which Rossetti wrote just before this event to his mother, he expressed regret at his having had to postpone the marriage very long, but he hoped he might "still have time to prove his thankfulness to her."² Unfortunately he had no time for that. After hurried and restless visits to this place and that in the hope of her regaining her health, she died in less than two years after their marriage. But he showed his regard for her by one signal act, an act which "has a tragic beauty when one considers what hopes Rossetti thus resigned."³ The poems which he had written "when Lizzie was ill and suffering, at a time when he "might have been attending to her," "shall go" with her, and so he laid his manuscript poems in her coffin between her cheek and her hair; and this volume would have remained there to this day, had not the kind insistence of Rossetti's friends and Rossetti's nature of yielding to friends' persuasions brought it again to light for the immense good of the world, within a decade after the tragic event took place.

"It is impossible that even the reptile rancour, the omnivorous malignity, of Iago himself, could have dreamt of trying to cast a slur on the

memory of that incomparable lady."⁴ She was herself an accomplished woman, a painter who painted with greater "fecundity of invention and facility" than Rossetti himself, and she wrote also some excellent verse. Her lines entitled "A Year and a Day" seem to be a picture of herself:—

Dim phantoms of an unknown ill
Float through my tiring brain;
The unformed visions of my life
Pass by in ghostly train;

A silence falls upon my heart,
And hushes all its pain.

Rossetti's feelings over this event, which ever after altered the outlook of his life and also his inner harmony to some extent, may be briefly expressed in his own lines:—

"Death, of thee do I make my moan,
Who hadst my lady away from me,
Nor wilt assuage thine enmity
Till with her life, thou hast mine own;
For since that hour my strength has flown,
Lo! what wrong was her life to thee, Death?
"Two we were, and the heart was one,
Which now being dead, dead I must be,
Or seem alive as lifelessly
As in the choir the painted stone, Death!"⁵

Mention must be made here of Rossetti's connection for sometime with "Morris, Marshall, Falkner and Co., started in 1860, by seven men, as the Pre-Raphaelite Brotherhood had been. The Brotherhood, says W. M. Rossetti, introduced into painting something that might well be called a Revolution, and the Firm introduced into decoration something still more revolutionary for widespread and as yet permanent effect. Rossetti was prominent in both adventures."

By 1862 Rossetti was a recognised painter and poet. His "Early Italian Poets" (1861) showed

¹ Swinburne, in "The Academy," 24th Dec. 1872.

² Poems, 1870, "To Death of his Lady."—Translation from Francois Villon.

³ Memoir: Fam. Let. Vol. I, p. 217.

him to be not only a close student of mediæval literature, not only an excellent translator, but also a thorough master of the Art of English Poetry. It was when the 19th century Dante was deprived of his Beatrice, it was when he could see her only in spirit, that the Dante of the 19th century became the true incarnation of the Dante of the Middle Ages, and often imagined his Beatrice in the purity of mediævalism. It was in such a mood that Rossetti gave us "Dante's Dream," "Beata Beatrix" and "The Blessed Damozel" (picture).

It is needless to follow the course of Rossetti's private life any longer, except to note that ever since his wife's death, traces of madness were visible in him and he took a morbid sentimental view of life, and thought all were his foes. But it is worthy of note that, in spite of his decaying health, made worse by the ungraceful attack of Buchanan, by the immoderate use of narcotics like chloral and by his own unregulated habits, Rossetti had always energy to work with his pen and brush almost to the very last day of his life.

During this period of his life, he gained such eminent friends as Watts-Dunton, "a hero of friendship" as Rossetti called him, Hall Caine who served faithfully during the last moments of the life of this remarkable painter-poet, of whom he speaks most sympathetically, and others too numerous to mention. It was also during this period that all the original work of Rossetti in the field of poetry came out, a volume of "Poems" in 1870, another volume of "Poems" in 1881 and a volume of "Ballads and Sonnets" in 1881, just a year before his death. Some of the best pictures painted by Rossetti belong to this period. He had energy enough to improve his "Early Italian Poets" and publish it as "Dante and his Circle" in 1873.

There is nothing strange in the one who did hard work, with a failing body and an unbinged brain, should seek for rest. But rest he could have none in this world, for his "Blessed

Damozel" was waiting for the day when his spirit would go to her and mix with her spirit in Heavenly and Eternal Love. She was lying with her arms cast along the golden barriers, laying her face between her hands and weeping, ready to receive her Dante's spirit, which now only "heard her tears."

"It is quieter now" wrote he to his sister on the last day of February 1882.¹ But this quieter state he hankered after, ever since the death of his Beatrice and the elevation of his "Blessed Damozel" to the "rampart of God's house," the resolute desire on his part to mix his earthly love with her Heavenly Love some day, was given to him to enjoy on the night of the Easter-Day, April 9, 1882, when he passed away quietly and was buried in the Brompton Churchyard with all solemnity on April 14, 1882, honoured "among painters as a painter, and among poets as a poet."²

In his habits, Rossetti was indolent and easy-going. Swinburne recognised in him "a cheerfulness of deportment in early life, which imparted an idea as of one who could not be depressed." The general expression of his face was decidedly pre-possessing. It had force, fire, predominance, frankness, and a certain magic which attracted every one to him. But the very core of his character was self-will. Despite his imperious dogmatism, the "always and essentially dominant turn" of his mind, he was none the less open to the influences of his family relationship, his natural and artificial surroundings of life, his "large circle of friends," and any number of ardent and kind well-wishers Dr. Hake, who saw Rossetti in the prime of his life, says, "he was the noblest of men." Even Hall Caine, who, having seen him at the very end of his life, thought that "irresolution with melancholy lay at the basis of his nature," is not

¹ Fam. Let. Vol. II, p. 395.

² Inscription on the tombstone, by W. M. Rossetti.

¹ Memoir: Fam. Let. Vol. I, p. 199.

² Fam. Let. Vol. II.

³ Eng. Men of Letters: Rossetti, p. 50.

lacking in his true admiration for Rossetti, to whom he attributes, "elasticity of sympathy," "generous appreciativeness of a stranger's first efforts," "unselfishness," and "unceremonious habits of daily life."

Of Rossetti's aversion for politics we have already spoken. In religion he has been described as a sceptic or an agnostic. It is true he disregarded theological discussions and formulated dogmas. But he was essentially of a catholic turn of mind in religious matters. He had great respect for the person of Christ, of whom he said, "certainly He was something more than man." His Dantesque conception of the world beyond shows that he was a believer in the Borderland. All through his works, this belief may be traced. He was a firm believer in spiritualism. In mesmerism he had a reasonable faith. He was a friend of the lower classes and he had a particular dislike for the self-asserting section of the aristocracy. He was a worshipper of pure beauty. Though he did not take a Wordsworthian delight in counting "the streaks of the Tulip," he was affected deeply by the general impression of natural scenery. To him the Human Being was the Lord of Creation.

At one period of his life, Rossetti particularly delighted in the collection of bric-a-brac and of queer outlandish animals, and converted his house into "a miniature South Kensington Museum and Zoo combined." Dunn, in his "Recollections of Rossetti and his Circle," 1904, relates a very amusing story of Rossetti's pilfering a beautiful blue china from Howell's and the latter's recovery of it by the same method, and gives several curious anecdotes concerning Rossetti's eccentricities, of his taste for curios and his peculiar collection of animals from the squirrel to the zebu, and also many interesting stories of mesmeric entertainments and spiritualistic experiences, which Rossetti saw and was deeply influenced by in his work

especially after his wife's death, when Rossetti became a firm believer in table-turning and spirit-rapping.

(To be continued.)

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PRACTICAL POINTS IN THE TEACHING OF ENGLISH COM- POSITION IN INDIAN SCHOOLS.

A PRINCIPAL reform in the teaching of English in Indian Schools and Colleges within recent times has been the greater emphasis laid on the exercise in writing compositions for pupils. The diligence and the example to be set to the pupils in the sense of duty one would desire in a teacher is put to no more severe test than in the teaching of composition. Virtuous resolutions are formed at the beginning of the educational year for a thorough system in the teaching of composition but the record at the year-end is nearly always disappointing. The best part of a literary training is perhaps in the composition exercises and still they are the most elusive part of the educational curriculum.

CORRECTION.—The greater part of composition teaching is a pruning process. You may trust to the exuberance and the imagination of the boy but not to his arrangement, accuracy or truth. Towards this pruning process the actual correction of the exercises is most essential. About sixty books a week will be a reasonable number for a teacher in the High School or College and the promptness and regularity with which these are returned week by week, while advancing the composition powers of the pupils, will also serve as an excellent moral lesson.

NOTE-BOOKS.—Pupils should always write their exercises in note-books and should write them short, so as not to tire the patience of the teacher.

CLASS-WORK.—Composition classes, especially in the higher Forms and College classes, should be made interesting. A composition

class stands nearest the danger of becoming the duller event to the pupils and the genius of the language-teacher can best be tested by his ability to make it interesting. The teacher usually keeps "teaching" or "talking" hours alternately with the "writing" hours when the pupils do not require his active assistance. The detailing of the errors committed by pupils is a task requiring considerable art. Light satire and humorous remarks are of great value in impressing vividly a sense of correct usage in language on the minds of the pupils. For example a student writing an account of a disastrous flood spoke of himself being the only survivor to give others "this sorry account," meaning a "sorrowful" account. The teacher said: "However much you may be modest about your compositions, boys, I do not like you to call them "sorry" compositions. A "sorry" composition is a poor composition and the student here meant only a "sorrowful account," and so on.

It is however desirable that the names of the students committing the errors should not as a rule be exposed to the general class. A certain amount of deliberate precaution will also be needed in this matter. But the teacher should note for his own information in a separate note-book the names of the authors of the errors so that individual attention may also be paid to the pupils.

We have happily advanced from those days when theoretical books on composition and grammar were followed blindly much to the disgust and profitlessness of pupils. But the place of grammar has often been apt to be misunderstood now. It should not disappear but be pursued on a rational basis. When errors against English usage are made clear

to pupils, whenever possible, it is useful to formulate grammatical rules so as at least to enable one to finger exactly the nature of the error.

Of course, most offences against the King's English cannot come within the codification of any grammar.

PREPARATION FOR A COMPOSITION CLASS.—The expatiation on errors in composition should always be preceded by preparatory work. All general errors should be separately classified and all associated matter should be noted. Errors as presumed in theoretical books on composition, are tiresome if treated in the class-room. Real errors committed by the pupils themselves on the other hand are entertaining, but the teacher should always conceal the author of the errors from general publicity in the class.

The Black-board should be freely used in this exposition. The exposure of all defective expressions should be followed by suggestions of correct forms of expressions which should be, as often as possible with the co-operation of the pupils.

EMPHASIS ON THOUGHT.—One tendency to be guarded against especially in all the earlier stages in teaching composition is to make it a formal art. In correcting all defective and erroneous expressions the emphasis should nearly always be on the idea or thought that should have been in the pupil's mind. The comparison of the thought with the verbal expression is the real way to correct the pupil.

THE DISTRIBUTION OF THE CLASSES.—In the distribution of composition teaching among different teachers, there should be guiding

principles regarding the work to be allotted to the "senior" and the "junior" members, or the "abler" and the "less abler." The task of exposition in the lower classes is more subtle and more taxing in one way. On the other hand higher graces and principles of rhetoric need a keen and exact attention from the teacher in the higher classes. One way of escaping from this difficulty is perhaps to give work by rotation to all the men in all the classes. This is an excellent scheme in College classes but may entail an inconvenient interruption in the progress in lower classes.

P. R. KRISHNASWAMI.

Lower Secondary Arithmetic

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PLANT AND ANIMAL LIFE IN THE REVISED ELEMENTARY SCIENCE SYLLABUS.

(S.S.L.C.)

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THIS part of the new Elementary Science Syllabus is likely to be attended with some difficulty in actual working for the following reasons:—i. Lack of properly qualified Assistants to teach it. ii. The fact that the whole is limited to 25 lessons. iii. The fact that several specimens required for study are likely to be out of season in the second part of the short term fixed for the course. This is the most unpropitious season of the year for nature study.

I beg to offer hereunder my suggestions for reducing the course to 25 lessons, and obviating the other difficulties mentioned above.

To get through the whole course in 25 lessons (1) all thought of a regular study of the two text-books mentioned in the class should be put aside. (2) Some of the subjects involving observation of specimens not in season, or observation of phenomena extending over the whole year, should be relegated to *nature diaries* to be filled in by the pupils outside school hours. (3) The twenty-five lessons should be on thoroughly heuristic lines, so that even teachers not well-posted up with the necessary knowledge, may first teach themselves and then conduct the lessons. (4) Such pieces of information as are beyond the unaided effort of the pupils should form subjects of brief demonstrations, or notes by the teacher or should be got from books. Such heads are marked 'notes' below. (5) A good deal of time may be gained by a slight re-arrangement of the headings. A sample lesson is appended. The form of diaries is also shown.

Headings of the Syllabus.	Suggestions for grouping, &c.	Lesson.
The life of the bean plant	Diary *	Lesson 1
The several parts of the bean plant ... ..	.....	
Parts of a bean seed ... ..	.....	
The germination of the bean seed: The necessity of i. moisture; ii. life in the seed; iii. air supply for germination	[Add 'iv. warmth']	" 2
Food stored in the cotyledons and its use	Demonstration of stomata under the microscope by the teacher	" 3
The absorption of water from the soil by the roots and the constant evaporation of it from the leaves		
The path taken by the water in the plant	Omit, as this is covered by Lesson 3 above and 4 below.	" 4
The use of water to the plant		
The way in which plants obtain their food from i. the soil, and ii. the air ... ..	.....	" 5
The preparation of starch by leaves in sunlight		
The behaviour of plants towards light ... ..	.....	" 6
Sensitive plants; the sleep movement of leaves		
Water plants ... ..	.....	" 7
Climbing plants		
Parasites and saprophytes ... ..	.....	" 8
Desert plants		
The storage of food in plants ... ..	.....	
Plant defences ... ..	.....	
Plant respiration ... ..	.....	
Flowers and their work; flowers and insects ... ..	.....	

Headings of the Syllabus.	Suggestions for grouping, &c.	Lesson.
Fruits: dispersal of fruits and seeds and its advantages ... ..	.....	Lesson 9
[The external.....each :—]		
The earthworm: Senses, castings, economic im- portance	} Keep live earthworms in a terra- rium	} " 10
The garden snail: Senses, relatives of the snail; the pond snail	} Keep fresh water snails and mussels in glass aquaria	} " 11
Bivalve shells	} Notes]	} " 11
[The pearl oyster; how pearls are produced.	} A variety of gastropod shells picked up from the nearest sea beach	} " 11
Spiral shells... ..	} Metamorphosis diary [charts of the various stages should be hung in the class]	} " 11
Insects: The moth and the } butterfly } Provide breeding The mosquito } cages		
The house-fly		
The grass-hopper		
Aquatic insects... ..	} Specimens like the water beetle, water boat-man, &c., to be kept in a glass aquarium	} " 12
Ants, bees, wasps, termites... ..	} Museum specimens of royalties, workers, &c., to be shown and sketched by the pupils	} " 13
Do. do. Organisation and gov- ernment of the Colonies.	} Notes	} " 13
Insects and disease		
Harmful and beneficial insects	A.—Types of harmful insects— i. poisonous stings ii. parasites (lice, &c.) iii. carriers of disease iv. crop pests, &c. B.—The scavenging beetle, &c. Fish in an aquarium	" 14
Fishes: The use of fins [how a fish breathes. Warm and cold-blooded animals	} Notes]	} " 15
Frogs: How a frog breathes. How a frog catches its prey. The work of the tongue. [Metamorphosis of the frog]	} Observation should be supplement- ed by notes	} " 16
[Hang charts showing the various stages in the class]	} Diary (too valuable a phenomenon to be left out)	} " 16
Snakes: Poisonous and non-poisonous snakes [Sketches of familiar snakes]	} Sketches from charts if actual specimens are not handy	} " 17
Poison glands and fangs do. do.		
[Treatment of snake bites	} Notes]	} " 18
Other reptiles: Lizards and tortoises		
The Pigeon (or any common bird) wings, feathers and general build of the body considered with reference to flying.	} Live pigeon and skeleton of a pigeon	} " 19
[Some common birds of the locality... ..	} Diary]	} " 19
Nest building, care of young, songs, &c....		
General structure such as wings, beaks and feet considered with reference to their habits of living.	}	} " 20

Headings of the Syllabus.	Suggestions for grouping, &c.	Lesson.
Importance of birds to man; birds injurious to man ... ..	.....	Lesson 21
[Causes of decrease in bird life; effects of bird destruction; economic importance of bird protection	} Notes]	
Mammals. Different groups of mammals consider- ed briefly [i. Groups of mammals seen at home or in our immediate neighbourhood]	}	} " 22, 23
[ii. Other interesting groups of mam- mals]	} Notes]	
[The word 'Notes' is used above to include any sort of information not gained by the pupils by their own exertion]	} Examination of pupils' nature diaries and revision	} " 24 25
I. Plant Diary.		
The Bean plant.		
[Note the dates on which you first observe the fol- lowing and sketch the specimen, or parts names.]		
	Sketches	
1. Planting of seed ... ..	.....	
2. Appearance of the cotyledons above the ground... ..	the whole specimen	
3. " " regular leaves.	do.	
4. Flowering	a cluster of flowers.	
5. Fruiting	a fruit	
6. Death of the plant ... ..	.....	
Charts illustrating the various stages of metamor- phosis of i. the moth; ii. the butterfly; iii. the mosquito; iv. the frog, should be procured or prepared and hung in the class early in the year to enable the pupils to recognise the stages at first sight.		
The necessary breeding cages (for i and ii) and aquaria for iii and iv should be provided. A wide mouthed glass jar will suffice for iii.		

II. Animal Diary.

Month and date of observation.

Month and date of observation.

Serial No.	ANIMAL.	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April
	The Moth: i. Eggs ...										
	ii. Hairy caterpillar. ...										
	iii. Pupa in cocoon ...										
	iv. Adult ...										
	The Butterfly: i. Eggs ...										
	ii. Green or spotted caterpillar ...										
	iii. Pupa ...										
	iv. Adult ...										
	Mosquito: i. Eggs ...										
	ii. Larva ...										
	iii. Pupa ...										
	iv. Adult ...										
	Frog: i. Spawn ...										
	ii. Tadpole with external gills ...										
	iii. Tadpole with internal gills ...										
	iv. Appearance of hind limbs ...										
	v. Do. of fore limbs ...										
	vi. Adult ...										
	Birds:—										
	Nest building: i. Crow ...										
	ii. House-sparrow ...										
	iii. Kite ...										
	iv. Parrot ...										
	v. Weaver-bird... ..										
	Song: i. Koil ...										
	ii. Myna ...										
	iii.										
	Migratory birds:—										
	i. Paddy crane ...										
	ii. Snipe ...										
	Mammals: Breeding season of domestic mammals:										
	i. Cat ...										
	ii. Dog ...										
	iii. Cow ...										

A Sample Lesson.

[Notes by the teacher are put in italics.]

Specimens: i. Bean plant with all parts; ii. Bean seeds previously soaked in water.

Subject.	Serial No. of instructions	Questions or instructions for practical work.										
Parts of the bean plant.	1	In the living condition of the plant, do you see the whole of it above the ground?										
	2	What do you call the underground part? What do you call i. the main root going down from the stem? ii. its branches?										
	3	What various parts do you see in the part of the plant above the ground?										
	4	<i>Synopsis.</i> —Make a sketch of the entire plant. Mark the ground level by a dotted line. Mark by guide lines the parts, the names of which are italicised below (one of each sort may be marked).										
		<table> <tr> <td>i. <i>Stem</i></td><td rowspan="4">} Shoot</td><td rowspan="7">} The plant body</td></tr> <tr> <td>ii. <i>Leaves</i></td></tr> <tr> <td>iii. <i>Buds</i></td></tr> <tr> <td>iv. <i>Flowers</i></td></tr> <tr> <td>v. <i>Fruits</i></td><td rowspan="3">} Root</td></tr> <tr> <td>vi. <i>Taproot</i></td></tr> <tr> <td>vii. <i>Rootlets</i></td></tr> </table>	i. <i>Stem</i>	} Shoot	} The plant body	ii. <i>Leaves</i>	iii. <i>Buds</i>	iv. <i>Flowers</i>	v. <i>Fruits</i>	} Root	vi. <i>Taproot</i>	vii. <i>Rootlets</i>
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Parts of a bean seed.	5	Take a well-soaked seed and squeeze it. Note the small hole through which a drop of water comes out. What do you think is the use of this hole?										
	6	Remove the seed-coat. Separate the two bulby masses (<i>cotyledons</i>) a bit apart to get a view of the young plantlet (<i>embryo</i>) between. In this again, note the position of i. the future shoot (<i>plumule</i>); ii. the future root (<i>radicle</i>).										
	7	<i>Synopsis.</i> —Remove one cotyledon. Sketch the remaining cotyledon and embryo marking the parts named and italicised below:—										
		<table> <tr> <td>Seed</td><td>{ Seed coat</td><td rowspan="2">{ Plumule</td></tr> <tr> <td></td><td>{ <i>Cotyledons</i></td></tr> <tr> <td></td><td>{ <i>Embryo</i></td><td>{ <i>Radicle</i></td></tr> </table>	Seed	{ Seed coat	{ Plumule		{ <i>Cotyledons</i>		{ <i>Embryo</i>	{ <i>Radicle</i>		
Seed	{ Seed coat	{ Plumule										
	{ <i>Cotyledons</i>											
	{ <i>Embryo</i>	{ <i>Radicle</i>										
		[To the Teacher.—Since this is an elementary course, no mention of the hypocotyl need be made.]										

S. S. L. C. SCHEME—SOME SUGGESTIONS.

WITHOUT in any way interfering with the main principles underlying the present S. S. L. C. Scheme, some suggestions are briefly given here to make it more popular, and no attempt has been made here at an elaborate discussion.

I. COURSES OF STUDY.

A COURSE :

(1) *English*.—As at present there should be text-books for detailed and non-detailed study. But the quantity for the latter should be only about one half of what it is now.

(2) *Vernacular*.—The text-book now prescribed for non-detailed study for the vernaculars of the C Course should be made compulsory for all, so that there may be something tangible to read, and there should be one or two questions on the matter in the book, and the subject itself may be called simply "Vernacular."

(3) *Elementary Mathematics*.—The syllabus should be reduced by omitting therefrom Present Worth and Discount, Stocks, Mensuration of difficult solids and frustra thereof, and Graphical methods. Algebraical representations and Applications of Simultaneous Equations, all of a very easy nature may be retained, as also simple geometrical constructions. In compound interest, questions in which the interest is compounded in fractions of years should be omitted.

(4) *Geography and Indian History*.—A word of explanation is necessary for including these subjects in the A Course: Every one that lays claim to secondary education should know at least the outlines of the geography of our globe, and a knowledge of the main

landmarks of the history of the land is essential for every Indian pupil. And so long as they are in the B Course they do not as a matter of fact receive the attention they deserve. Hence their inclusion here. But the matter taught should be very little, and text-books should be prescribed in them to secure uniformity in teaching and avoid vagueness in questioning. For Indian History, for instance, the matter contained in Mr. K. Viraraghavachari's book will suffice. Similarly a suitable book may be chosen for Geography.

B COURSE :

(1) *Elementary Science*.—Any of the sciences at the discretion of the schools may be taught in a popular manner. Bulletin No.4 of the Teachers' College, Saidapet, is recommended for the selection of subjects.

(2) *Drawing*
(3) *Needlework* } As at present.

C COURSE :

The same subjects as are now included herein may continue, with the following modifications :—

(1) *Physics and Chemistry* should be combined into one subject, the syllabus being reduced by one half in each. This will secure uniformity of teaching in Group I of the Intermediate classes in the colleges. As it is, students who have specialised in High Schools in Physics and Mathematics or in Physics and Chemistry or in Mathematics and Chemistry join colleges, and the lectures there have in consequence to begin practically Chemistry for some, Mathematics for some more, and Physics for the rest. Therefore much difficulty ought to be experienced there. Hence if Algebra and Geometry as it is, and Physics and Chemistry as proposed herein be

taken up in the High School, the College course in Group I is bound to be uniform without necessitating any individual adjustments. A probable objection may be raised that in schools where either Physics or Chemistry only is taught now, outlay will be required for starting the other. But it will not be much as the syllabus will be very much reduced.

(ii) Shorthand and Type-writing should be separated into two subjects increasing if necessary the syllabus in each subject slightly. At present many students that do not want to enter upon the University course and who would be immensely profited by such technical subjects are scared away owing to the heaviness of the course. Those that want to qualify themselves as Short-hand-Typists may study these two subjects alone without the necessity for taking up another subject for completing their certificates.

(iii) Commercial Practice and Commercial Geography should be similarly separated, the standard of each being made equal to that of the Intermediate grade of the Government Technical Examinations. This will not only give each technical subject its due importance but also enable candidates to take up Commercial Practice and Book-keeping which also form a natural combination.

(iv) Book-keeping should form a separate subject in itself, and there should be a separate paper in it on principles. And Commercial Arithmetic may altogether be dispensed with, as no practical purpose is served thereby.

II. GENERAL.

(1) The subjects of the B Course should be taught in Forms IV and V only, so that in

Form VI the pupils may pay exclusive attention to the A and C subjects only.

(2) The system of Moderation should be done away with.

(3) The test of Presidency average is an unsteady one depending not upon individual merit but on the relative one, and judged by it a candidate that scores the same marks in a subject in two successive years will be pronounced to have failed in one year and passed in the next, if the majority of his fellow candidates are strong in the subject in the first year and weak in the second. Hence a percentage should be fixed; and 35 % is recommended for each subject, the Elementary Mathematics and Geography and Indian History, i.e., (3) and (4) of the A Course, being considered together as forming one subject for the purposes of deciding the result, to give equal scope for specialists in Mathematics and History who alone go to the University.

(4) Candidates that have passed in certain subjects ought not to be compelled to appear in those subjects again. The chief advantage that the S.S.L.C. scheme had over the Matriculation from the candidates' point of view, namely, "the Compartment System" has now been removed by the interference of the University; and the candidates have now to face all the hardships of the old Matriculation and even more. Hence it is necessary that "the Compartment System" should be recognised even for those that enter upon the University course.

(5) The supplementary candidates need not be compelled to remain in the school when they have no classes to attend.

(6) Heads of institutions should be given the option of detaining supplementary can-

didates from appearing for the public examination if they do not show good progress after remaining in the school till the application time. To give them a chance till then is better than dismissing them in the middle of the year before they are given full opportunity to improve themselves.

III. CERTIFICATES AND ENTRIES THEREIN.

(1) In the place of the present unwieldy form, the certificates may be half the foolscap size.

(2) The finger prints may be dispensed with.

(3) One page will do for all the entries relating to one year. Provision may be made therein for the marks of the first term and for the whole year. But it is not necessary to make any entry for the first term in the case of boys that continue in the same school throughout the year. One entry in the year column at the close of the year for a maximum of 100 will do in their case.

(4) The entries in the latter part of the certificate may also be minimised by entering therein only the VI Form school marks. For the B Course subjects the rank need not be noted as no practical purpose is served thereby.

(5) As uniformity should not be expected in the award of marks in different schools, there should be columns as at present for the Form average in the body of the certificate as well as in the last pages in the case of the school marks only. For the public examination marks neither the school average nor the Presidency average is necessary, as percentage has been suggested above.

T. V. SRINIVASA Aiyar.

THE GROWTH OF NATIVE FEMALE EDUCATION IN BENGAL.

EDUCATION BEFORE ADVENT OF THE ENGLISH.

IN view of the illiteracy prevailing among Indian women of his time, a writer in the *Calcutta Review* of June 1861, boldly remarked: "That women in India are not taught to read, that the art should be forbidden them both by religion and by custom, that they should be deemed unworthy of such an acquisition by a people who boast of their learning and civilization, is at once the condemnation of Hinduism, and the opprobrium of its adherents." The Hindu Shastras, however, do not enjoin that Hindu females should be kept in blissful ignorance of the knowledge of reading and writing. Not to go back into the remote region of antiquity, instances are not altogether wanting in comparatively recent history, of Hindu females having been educated in various branches of learning. In his interesting study of Hindu Society—"The Hindus as they are," Mr. Shib Chander Bose has justly observed, "authentic history furnishes abundant evidence of the former prevalence of female education in the country to a considerable extent, until Mahomedan oppression not only prevented Hindu women from pursuing a literary career, but ultimately drove them into a state of unhealthy seclusion for the preservation of their honour."

LATER SUPERSTITION.

Immured within the purdah for a long time Hindu women came to cherish certain curious fancies and fears. When, in the second decade of the nineteenth century, Christian missionaries came forward to disseminate learning among the girls of Bengal, Hindu women were dominated by the fear that a girl taught to read and write would soon after marriage become a widow,—the hardest lot that could befall the sex; "and the belief was generally entertained in native society that intrigue was facilitated by a knowledge of

letters on the part of females." It should be noted that the Mahomedans participated "in all the prejudices of the Hindus against the instruction of their female offspring."

EARLY MISSIONARY EFFORTS.

It is generally believed that the first attempt in India to impart instruction to native girls through the medium of schools was made by the Rev. Mr. May, who in 1818 opened several girls' schools in and about Chinsurah in the district of Hooghly. These schools, however, were very short-lived. In 1822 the Ladies' Society for Native Female Education was established; Miss Cook (afterwards Mrs. Wilson) was the most active member and strove her best to make the institution a success. The number of schools founded by this Society in Calcutta rose to 22 in a few days and instructed about 400 pupils. The illustrious Serampore missionaries were not slow in forwarding the movement; they started several schools in 1823, and pushed their activities to the towns of Khulna, Burdwan, Katwa and Bankura.

NATIVE PARTICIPATION.

Educated Bengalees, too, were not altogether inactive in the meanwhile. We have it on the authority of the Hon'ble Mr. J. E. Drinkwater Bethune that Raja Sir Radha Kant Deb Bahadur, K.C.S.I., was the "first native in India who in modern times has pointed out the folly and wickedness of allowing the girls to grow up in utter ignorance, and that this is neither enjoined nor countenanced by the Hindu Shastras." In August 1849, the Council of Education received a communication from Babas Joykissen and Rajkissen Mukherji relative to the establishment of a female school at Uttarparah; the Council regretted the existing state of education funds would not permit them to entertain the proposal submitted.

GOVERNMENT RESOLUTION OF 1850.

Up to this time Government did not take any active part in the movement for the spread of

female education; in April 1850 the Government of Bengal communicated to the Council of Education the following Resolution of the Government of India:—"The attention of the Governor-General in Council has been lately directed towards the subject of Female Education in Bengal...It is the opinion of the Governor-General in Council that no single change in the habits of the people is likely to lead to more important and beneficial consequences, than the introduction of education for their female children. The general practice is to allow them to grow up in absolute ignorance; but this custom is not required or even sanctioned by their religion; and in fact a certain degree of education is now given to the female relatives of those who can afford the expense of entertaining special instructors at their own houses...The Governor-General in Council requests that the Council of Education may be informed that it is henceforward to consider its functions as comprising the superintendence of native female education; and that whenever any disposition is shewn by the Natives to establish female schools, it will be its duty to give them all possible encouragement and further their plans in every way."

BETHUNE SCHOOL FOUNDED, 1840.

A great impetus had already been given to the cause of female education in Bengal by the establishment of the Bethune Girls' School, which was opened by the Hon. Mr. Bethune, then Legal Member of Council, under the name of Hindu Female School, in May 1849. It started with 23 pupils and was "for sometime maintained at the entire cost and under the direct management of Mr. Bethune, who also by his will left lands and other property in Calcutta for its endowment in perpetuity." On the death of Mr. Bethune in 1851, the institution was maintained by Lord Dalhousie for five years who paid Re. 8,000 annually from his own purse. This charge was afterwards transferred to the State.

age, etc.; a separate and cheaper school was, however, opened in 1876 "in the north wing of the building called the Lower Bethune School for the benefit of poor but respectable Hindu girls in the neighbourhood who might be unable to pay the fee charged and willing to walk to the school."

BRAHMO INFLUENCE.

It was about this time that the influence of the Brahmos was most felt on the cause of female education. The active interest of the members of the Brahmo Samaj in female education was already evinced very strongly in the Sixties, when "side by side with the efforts made by the Society of Theistic Friends for the encouragement of education inside the zenana, the first monthly journal for women called the *Bamabodhini* made its appearance." Under the auspices of the Indian Reform Association, an adult female school was opened in 1870, where education was imparted to the wives and daughters of Brahmos in all important secular branches of knowledge. Close upon its heels came the Hindu Mahila Bidyalaya (soon after re-named the Banga Mahila Bidyalaya) which was a boarding school for women started by the Brahmos upon advanced principles of education. In 1875 Mr. Justice Phear who was President of the Bethune School suggested the amalgamation of this school with the Bethune School, in order that the latter might have wider scope: this was done in 1878.

CREATION OF PRIZES AND SCHOLARSHIPS;

STANDARDS FOR EXAMINATION.

In the earlier days of the movement for female education many prominent Bengalis—Pandits Iswar Ohandra Vidyasagar and Madon Mohan Tarkalankar among them—had identified themselves with it. As female education progressed steadily in the province, many more gentlemen of light and leading upheld its banner. The Uttarparash Hita-kari Sabha founded in 1864 volunteered to supervise the education of girls and held out scholarships and prizes to the best pupils in the 24 Pargunnahs, Howrah and Hooghly. Sev-

eral similar societies sprang up in different parts of the province in a few years, viz., the Sylhet Union, Faridpur Suhrid Sabha, Bakarganj Hita Sadhani Central Bengal Union Sabha, Jessore-Khulna Union, and the Bikrampur Sammilani Sabha. Zenana societies started by missionaries multiplied at the same time: the English Church Mission, the Scottish Ladies' Association, the Free Church Mission and the American Mission did incalculable benefit to the cause of teaching women in Bengal. The Government took advantage of every opportunity that presented itself in the way of furthering the expansion of knowledge among women. It was brought to the notice of the Director in 1874 that the education of girls (infants) in boys' schools and schools for big girls (over twelve years old) that had been started under Brahmo influence and were opened to inspection were not duly supported; it was also pressed upon the attention of Government that something ought to be done to supervise the instruction imparted in the zenana. The result was that, many Government scholarships for girls were founded in 1874, viz., six in Burdwan, eight in Midnapur, two in Hooghly; and in the 24 Pargunnahs and in Barisal scholarships for boys were thrown open to girls; special scholarships were also created for the suburbs of Calcutta. At the same time Mrs. Monmohini Wheeler was appointed Inspectress of Girls' Schools and Zenana Agencies in Calcutta, 24 Pargunnahs and Hooghly. The appointment was most opportune. The Calcutta girls' schools were mostly under missionary management while schools in the mofassil were mainly looked after by natives; Mrs. Wheeler in her inspecting rounds soon discovered that although "more than half the total cost" for female education borne by Government "was still incurred in aiding the missionary agencies of Calcutta, the output was comparatively meagre: some of the native teachers employed by the agencies were ill-educated and often indifferent; they were little

supervised and consequently irregular in their women's instruction on a secure basis; and in work. Much was done by the Inspectress in the 1879 was established the following scheme of six next few years to regain lost ground and place standards for the examination of girls:—

Standard I (A).

Reading.	Writing.	Arithmetic.	Grammar.	Geography.
To recognize and name the letters of alphabet, vowels, and consonants.	To write the letters neatly and firmly.	To count up to 50, and be able to state of what two digits each number is composed; easy mental arithmetic.	...	...

Standard I (B).

To have a correct knowledge of the sound and formation of the different vowel signs; spelling of small words from Part I, Barnaparichay or other primer.	Writing easy words from dictation.	Numeration to 99; addition.	...	...
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Standard II.

To read with intelligence from any primer; to spell without mistake in Part II, Barnaparichay, or other book of the same standard.	Dictation from primer.	Notation and numeration up to four figures; addition.	...	...
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Standard III.

Competent knowledge of spelling in Part II, Barnaparichay; intelligent reading of Book III (Sishushikha) or any other of the same class; reciting ten lines of poetry from poetical Reader No. I.	Dictation from Book III.	Notation and numeration in five figures; addition; subtraction; tables up to 3×12 .	...	...
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Department was able to secure the services of some female teachers from the orthodox classes of Hindus and Muhammadans; but even then there was still room enough for the employment of many more such teachers, had they been forthcoming. Classes were accordingly opened in the Bethune Collegiate School and the Brahmo Balika Sikhalaya for Training Mistresses, and grants to Mission Schools were augmented on condition that no efforts would be spared to increase the output of such teachers. For the supply of an additional number of female teachers for girls' schools and zenana classes at home, classes were sanctioned by Government in 1904 for the training of schoolmasters' wives and Hindu and Muhammadan widows.

PIONEERS IN MEDICAL SCIENCE.

It has been observed already that provision was made in 1883 for the admission of lady students in the Calcutta Medical College. The first lady doctors to come out of that college were Misses Bidhumukhi Bose and Virginia Mitter who took their M.B. degree in 1890. That same year "eleven young ladies of the certificate class of the Medical College obtained the College license to practise medicine and surgery." The special facilities afforded by Government to female students in medicine seem to have had some effect in twenty years' time: the Dufferin Fund Report shows that there were in 1902 four lady students in the L. M. S. and M. B. classes and fourteen in the certificate class of the Medical College, while 43 females were studying in the four Medical Schools of the province. It should be noted, however, that the Hindu element has always been small in the female candidates for medical education, while the Muhammadan proportion is negligible.

BETHUNE COLLEGE AFFILIATED; OTHER COLLEGES.

The Bethune College, it is perhaps superfluous to mention, has done the greatest service in promoting higher education among women in Bengal. It had been sending out lady graduates since 1883, but it was not affiliated to the Calcutta University before February 1888; "in previous years candidates passing the B. A. Examination

from this institution were admitted to the degree by special grace of the Senate." Provision was made in this College in 1894 for lectures in Persian and Arabic, as there were some students from up-country who wanted to study these languages. It may be noted in passing that there were at this time 44 boarders in the College, "consisting of 24 Brahmos, 11 Christians, and, what is significant, 4 Hindus." It is an unmistakable indication of the progressiveness of the Native Christian and Brahmo communities that in the highest standards of examination their ladies should have not only predominated numerically over their Hindu and Muhammadan sisters but also appeared to greatest advantage. The management of the Bethune College, as already observed, had been entrusted to a Committee appointed by Government; in 1908 this Committee was dissolved and "replaced by a Governing Body and a Managing Committee constituted in accordance with the University Regulations." This College is affiliated to the University up to the B. A. standard; while the two other Colleges in the province—the Diocesan College and the College Department of the Lortie House School, both in Calcutta—for sending up ladies for University Examinations, are affiliated to the B. A. and I.A. respectively.

SECONDARY EDUCATION.

High Schools for imparting secondary education to girls have grown very slowly in Bengal. In 1901 there were only six of these schools teaching 556 pupils. Steps were taken in 1903 "to open an increased number of schools for Indian girls, and to educate an increased number of female pupils... With a view to giving facilities for having girls educated up to higher standards at home, Government has recently ruled that girls may draw the scholarship-stipends as prizes even without attending schools, provided that they prove that they have attained a higher standard by home study."

ITS EXPANSION.

The increase of Government grants to Girls' Schools in proportion to the increasing desire for female education caused several High English

Schools to be established for grown-up girls. It is somewhat gratifying to find that in 1913-14 the number of Girls' High English Schools went up to fourteen. Half the number was managed by Christian Missions, and three by Brahmos, the remaining four being under the direct control of Government; 1494 girls were being taught in these schools, 265 being in the high stage of instruction. The Mission Schools received a monthly aid of Rs. 100; and the Brahmo Girls' School at Calcutta and the Ravenshaw Girls' School at Cuttack were each aided to the extent of Rs. 500 a month. The question of increasing these Grants-in-aid was considered during the year by the Education Department. That sixty-one out of the seventy-five female candidates who appeared at the Matriculation Examination of 1914 should have succeeded in passing may be taken as a sure sign that these schools are working satisfactorily. Miss Lilian Brock, the Inspectress of Schools, however, is inclined to think—and very justly, too—that "the work of education is subordinated to the idea of a pass, and the social and domestic aspects of school work are neglected."

PRIMARY EDUCATION: GRANTS-IN-AID.

The rapid spread of primary education in Bengal has been mainly due to the munificence of Government. Calcutta was recognised as the best field for the promotion of female education, on account of its numerous advantages. In 1893 all Grant-in-Aid Schools were transferred to the exclusive jurisdiction of the Inspectress of Schools, subject to a general control by the Circle Inspector, and in September of that year Government ordered that Grants-in-Aid should be paid to all aided girls' schools and zenana agencies in and outside Calcutta "by results, tempered by considerations of attendance, the training aimed at and the number of boarders." The sum of Rs. 780 which had hitherto been paid in scholarships was redistributed into a number of prizes of lesser value. The system of determining Grants-in-Aid to schools by the results achieved by their pupils at examinations was abolished in 1901, and it was thought advisable that the grant to a

particular school should be determined by the number of pupils attending it and by the general efficiency attained by the school as a whole. The Grants-in-aid rules were thoroughly revised in 1905: it was ruled that Grants-in-aid should be provided for those schools which met in properly-equipped buildings and had duly constituted Managing Committees to supervise their affairs; also, the amount of aid granted to a school should depend upon the number of trained teachers employed. A sum of Rs. 55,000 is now allotted for aid to Girls' Schools in and near Calcutta. Besides these aids from the Provincial revenue, there were many schools outside Calcutta which were aided by district funds: a *guru* who instructed twenty girls or more received a monthly stipend of not less than Rs. 2-8 and a *guru* who taught less than twenty girls was paid a monthly reward of Rs. 1 for every eight girls under instruction. "In the case of girls' schools the realisation of fees is not...an indispensable condition of Government assistance."

MODEL PRIMARY SCHOOLS.

The Simla Conference of 1901 suggested that Model Primary Schools should be established in important centres; the Government of India supported this proposal and commended it to the Local Governments. As a result 49 Model Primary Schools at an estimated annual cost of Rs. 220 were opened in 1902; the number was increased to 86 in 1904. Some of these schools (originally intended to teach up to the Lower Primary standard) are now graded as Upper Primary Schools. These schools were sanctioned on the understanding that the public should provide the required buildings and keep them in repair. It is regrettable that generally speaking the public has not fulfilled this obligation, and the school-houses are not suitable. Moreover, the staff is decidedly of an inferior type, as the teachers do not get more than Rs. 16 per month, on an average.

OTHER PRIMARY SCHOOLS.

In addition to the Model Primary Schools described above, primary education is sought to be disseminated among girls through other kinds of

schools. The first kind comprises Primary Schools in District Board areas; they are dependent for their upkeep "upon whether there is any special interest taken in female education by members of the District Board or of the Subordinate Inspecting staff." Almost without exception, girls' schools of this class are in the charge of teachers whose pay "is generally too low for efficiency." The Primary Schools in Municipalities—the second kind—"are generally managed by a Committee, and are kept up by subscriptions, aided by a grant from the [Education] Department." They are on the whole efficient, and have some provision for teaching needle-work. The Mission Schools in Calcutta, which receive aid from Government and are perhaps the most numerous of aided schools in the town, are generally satisfactory. The fourth kind of Primary Schools includes Peasant Girls' Schools sanctioned by an order of Government in 1908, and "intended...to approach a class of people who are usually averse to female education, and who have not hitherto been affected to any appreciable extent by the ordinary schools so far as female education goes." Twenty-one peasant girls' schools were started in the Presidency Division in 1910. In 1914-15 there were twenty-two schools of this type and cost Government Rs. 3,432 a year. With the help of the Imperial Grants 20 Panchayati Union Girls' Schools have been started in some districts of Eastern Bengal under the Boards' direct management.

INDUSTRIAL INSTRUCTION.

That women should of late pay an increasing amount of attention to technical and industrial education is surely a hopeful sign. The Church of Scotland Mission opened a school at Kalimpong for instructing women in lace work. The school started with 16 pupils in the month of March, 1905, but in July 1907 there were 84 women and girls at work. Government came forward to help the school with Rs. 2,000 annually. Embroidery, crochet-knitting and weaving have been latterly added to the curriculum of the school, which has opened branches in other localities and has altogether more than 200 women under instruction.

There are other Industrial Schools for women at Dacca and Orakandi.

ZENANA EDUCATION.

The Education Commission of 1882 acknowledged the success of zenana-teaching by missionaries and recommended that grants for zenana-teaching should be recognised as a proper charge on public funds. The Simla Conference of 1901 endorsed the above recommendation. Sir Alexander Pedler proposed that ten missions should be granted special aid in consideration of the secular part of their zenana-teaching; and in accordance with a scheme sanctioned in June 1902, twelve Hindu and Muhammadan women were appointed on Rs. 30 a month to visit zenanas in the large towns and instruct the inmates free of cost. In 1903 in consonance with the recommendation of a conference of educational officers, both Hindu and Muhammadan, it was decided that "in certain selected places a female teacher should be engaged to give lessons at the house of respectable gentlemen, at which the girls and women of the neighbourhood could be collected." The sanctioned cost of each centre was to be Rs. 30 a month. The teachers were originally to be engaged and controlled by a local Committee of Hindus or Muhammadans, or of both, but they are now appointed by the Education Department.

PRIVATE SCHOOLS; the MAHAKALI PATHASALA.

Over and above the various schools for girls enumerated in this article, which are either directly under control of, or receive monetary aid from, Government, the "Quinquennial Review of Education" for 1907-12 shows that there were in 1912 over 4000 girls studying in private institutions. Of these, the most important is the Mahakali Pathasala. It was founded by a Nepali lady, Her Holiness Mataji Maharani Tapaswini, in 1893. It is an advanced institution, the aim being to bring up girls to pay strict attention to Shastri injunctions. No fees are charged and the girls are taught domestic economy, Sanskrit, Arithmetic, Geography, etc. It has fifteen branches in and outside Calcutta. The institution is supported by subscriptions and receives a capital

tion grant of Rs. 1-8 from the Calcutta Municipality.

MUHAMMADAN EDUCATION.

As the number of Muhammadan girls attending school had not increased substantially a Conference of Muhammadan gentlemen was convened in Calcutta early in 1907 to consider what might be done towards organising an efficient system of instruction among their girls. "A syllabus and a list of prescribed books for five stages of instruction, which correspond roughly to the infant section and the first four standards of an ordinary school, were drawn up. The preparation at the expense of Government of suitable readers and of a hygiene and domestic economy primer for teachers was recommended."

EXISTING SCHOLARSHIPS AND PRIZES.

It may not be out of place to enumerate here the several scholarships and prizes awarded to girls on the results of examinations. Three junior and two senior scholarships, one of each grade, are reserved annually for female candidates at the Matriculation and the Intermediate Examination respectively. During the school course girls compete for scholarships practically "under the same conditions as boys, except that 16 lower primary and three junior scholarships are reserved for them." They are not however confined to these scholarships; but not more than one scholarship of each class may be awarded in any one year to girls from the same school. It has been remarked already that the sum of Rs. 780 formerly paid in scholarships for the standard examinations in Calcutta was converted into a number of money prizes in 1898. The standard examinations were abolished in 1904, but the money prizes are still distributed on the results of an examination of the middle standards of girls' schools; there are thus 8 money prizes for standard IV, 10 for standard III and 20 for standard II.

CONCLUSION.

On the introduction of female education, the Bengal Native Society found itself split up into two camps; the liberals sided themselves with the new movement and left nothing undone to help

in the uplift of the tender sex. The orthodox class, blindly conservative and more numerous in the earlier days, violently opposed the innovation. These could be sub-divided into two classes each of which was inspired by a reason of its own to thwart the advancement of women: a few would exclaim with ill-concealed selfishness, "Who would do the cooking if women went to school?" There were others who in the plenitude of their wisdom sneered at the "little learning" female intellect was capable to have mastery of. Fortunately at the present moment these retrograde parties no longer exist. Government has been devising one scheme after another to make female education as widespread as possible, and funds have been lavishly provided to meet the desired end. In 1914-15 the recurring grants for female education amounted to Rs. 2,44,000 and the non-recurring to Rs. 6,02,000. At the same time societies and public-spirited individuals, both native and foreign, have done not a little to help forward the movement. The Educational authorities have found in recent years that "there is no prejudice against the education of girls." The only difficulty that now stares us in the face—and this is a problem that demands speedy solution—is the shortage of native female teachers. "If from among the orthodox Hindu and Muhammadan communities," wrote the Hon. Mr. W. W. Hornell in the *Progress of Education in Bengal in 1906-07 to 1911-12*, "lady teachers can be produced who by their position will command respect while by their capabilities they will justify in themselves the education they have received, then progress...is assured." It is greatly to be pitied that this difficulty has not been surmounted yet.

GOKULNATH DEAR.

CLOUD MESSENGER.

A Critical Appreciation of Kalidasa's *Meghadoota*

By RAO BAHADUR M. RANGACHARYA, M.A.,
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Srinivasa Varadachari & Co., Triplicane, Madras.

and minus ($-$); and in the second place, his book was the first in which there are traces of the use of these signs as symbols of operation, and not merely as abbreviations for surplus or deficiency.

Why these particular signs were adopted can only be a matter of conjecture. Dr. Ritchie suggested that perhaps $+$ was used because it consists of two marks joined together, just as two numbers are joined together in addition, and that $-$ denotes subtraction because that is what is left after one of the marks is removed. Others have supposed that the $+$ is a corruption of P (or p) the initial of plus: still others that it is the Latin conjunction *et*. It was the opinion of De Morgan that the $-$ was first in use, and that it was formed by the elongation of the dot ($\cdot$), the Hindn sign for subtraction, and, in his opinion, the early printed form of the symbol suggests that from this sign the plus ($+$) was formed by superadding a small cross for distinction.

The most recent explanation of these signs is a conjecture that they were originally warehouse marks. Goods were sold in chests which when full were expected to hold a certain established weight. Any excess or deficiency was indicated by $+$ or $-$; and there are some reasons for thinking that these marks were chalked on the chests as they came into the warehouse. Usually the weight of the chest may be supposed to have been deficient. This would then be taken as the standard case and the minus sign as the symbol; from this the plus ($+$) was then formed by adding the vertical bar to distinguish the two symbols. A theory like the above is, by the nature of the case, very difficult to establish to a certainty, but it must be

admitted to be the most plausible that has yet been advanced for the origin of our symbols for addition and subtraction.

The symbol of multiplication is St. Andrew's Cross. It was first used by two Englishmen in 1631: William Oughtred and Thomas Harriot. The former employed it in his *Key of Mathematics*, a text-book on arithmetic. What led to the adoption of this particular form for the symbol is unknown. Two other signs for multiplication were once proposed: the dot ($\cdot$) by Descartes and the curve ($\curvearrowright$) by Leibnetz. Both of these, although invented by great names, failed to obtain general currency.

Three ways of indicating division are in use: the dash, the colon, and the more common sign which is a combination of the two. The first was due to the Arabs, who wrote the quantities to be divided in the form of a fraction with a line drawn between them. Dr. John Pell of Breda, the friend of Newton, invented the now current sign ($\div$) and first used it in 1630. The colon or symbol of ratio seems to be a modification of the common sign of division, but who first omitted the dash, it now seems impossible to tell. It occurs in a work by Clairant, published in 1760.

The use of the exponents to mark the power, has become general since the time of Descartes. His making extensive use of them has led to the mistaken notion that he was the inventor. They were, however, employed by De la Roche as early as 1520.

The radical sign ($\sqrt{}$) is a corruption of the initial letter of the word *radix*, root. The root of a number was formerly indicated by writing the letter r before it, and this letter

was gradually changed to the form $\sqrt{}$. This sign was first employed by Stifel who introduced also the signs for plus and minus as indicated above.

OTHER SYMBOLS.

The remaining symbols of arithmetic (exclusive of the symbols of number) are not symbols of operation. Nor it is easy to comprehend them under a single term. It has been found convenient, therefore, to treat them in this place in connection with the signs of operation.

Of the three so-called symbols of aggregation the vinculum was introduced by Vieta in 1591 and the brackets and parenthesis were first used by Albert Girard in 1629.

The double colon ($::$) used to denote proportion, or the equality of the two ratios, was introduced by Oughtred in 1631 and was brought into common use by Wallis in 1686. There seems to be little use; in retaining a separate symbol to express the equality of two ratios, and confusion and misunderstanding would be avoided for beginners, if it were replaced by the sign ($=$).

The sign of inequality seems to be a modification of that of equality. The want of parallelism in the lines neatly symbolizes the want of equality in the quantities. They were introduced by Harriot in 1631.

The symbol for equality ($=$) was at one time used to denote subtraction. On the other hand, equality has at different times been symbolized by various other symbols. The current sign ($=$) was introduced by Robert Recorde in 1540. He says, he selected that particular symbol, because, than two parallel straight lines no two things can be more

equal. It has however, been pointed out that the same symbol was not an uncommon abbreviation for the word *est*, in mediæval manuscripts. This seems to point to a much more probable origin.

In summing up the above, it appears that the printers' art has put us in possession of tolerably full and reliable information as to the origin and introduction of the six symbols of operation. All of them belong to the period of modern history and are a product of the revival of learning. One each of the signs of operation was furnished by France, England and the Netherlands, and three by Germany alone. Of the other symbols named, all were introduced by Englishmen, with the exception of the vinculum which is due to Vieta, a Frenchman, and the brackets and marks of parenthesis, which were invented by the Dutch Mathematician Girard.

K. S. LUCKDOOR.

In Active Preparation.

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BY

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THE ROMANCE OF CHILDHOOD IN ENGLISH POETRY.

IN days when for purposes of national uplift increased attention is being concentrated on children, it will not be amiss if I seek to reveal some of the charms which some of the masters in English Poetry have found in childhood. The expression, "the child is the father of man" is too well-known to us. This is true of every child that draws its breath, whether in gorgeous palaces or humble huts, but being as I am a believer in Johnson's dictum that all our illustrations calculated to impress human minds must be taken from the biographies of great men, I shall illustrate it by a few references to actual history. Buddha was from the very first of a saintly disposition, the Great Macedonian, while a boy, liked to hear of battles and to be instructed in the geography of the neighbouring countries, the two Gracii were in their very infancy claimed as her most precious jewels by their mother, the boy, Julius Cæsar, was early recognised to be equal to a number of Mariuses, George III of England was from the very first while under the tutelage of his mother like a king, and last of all even the Great Corsican adventurer's early humility was recognised to be but Young Ambition's ladder. But this is not the real charm which poets like Blake and Wordsworth sought to ascribe to childhood.

First let us see what William Blake has to say. The Romantic upheaval in the English Literature of the nineteenth century led to a widening of the sympathies which in its turn became pronounced in increased feelings towards childhood and animal life, not to speak of that greater reverence towards Nature and the Middle Ages. And even as to

childhood, this change took two forms. Some like Cowper and Elizabeth Barrett Browning looked at childhood through purely secular eyes, felt keenly the pains and temptations to which it is subject and offered prayers on behalf of children. But the two Williams found in childhood something more, something spiritual, and it is to it that I turn my attention.

"William Blake gave the most perfect expression ever given to baby-life, to what a man could remember of himself as an infant or could enter into as existing in other infants, or could love as of the essence of infancy." He himself in his childhood had many dreams and on more occasions than one was forced to feel the mighty impulse from Heaven. Once he saw a number of angels singing round a tree; at another time, he heard the moanings of a ghost. He had been in his childhood accustomed to intangible and shadowy visions, but the striking thing about him was that he believed in those visions. "In conceiving a vision, he saw it, and in seeing it, he believed in it, and in believing in it, he spoke of it in terms which affirmed its existence." To him mind is the greatest thing about man, body is a sham or at the most a habitation for the mind. According to him, man, being endowed with this noble "mind" which is but the reflection of God, is the most favoured of God, a divine emanation, an eternally subsisting revelation of the deity. And of the various stages of the life of such man, he declared childhood the best.

This holy significance in childhood pervades the whole mass of his writings. He emphatically declares childhood the most expressive of the Holy Image, hence he says,

"Sweet babe, in thy face
Holy Image I can trace;

Sweet babe, once like this
Thy Maker lay and wept for me;

.....
Thou his Image ever see
Heavenly face that smiles on thee
.....
Infant smiles are his own smiles
Heaven and Earth to peace beguiles."

Hence he also believes that children are under the perpetual watch of Gods and when the little boy, lost in the lonely fen, led by the wandering light, began to cry,

"God ever nigh
Appeared like his father in white,
He kissed the hand and by the hand led
And to his mother brought."

He next praises childhood for the secret sweet desires that take rise in its mind and finds the greatest pleasure in tracing on the sweet face of a baby "its soft desires, secret joys and secret smiles and little pretty infant wiles." He is also fascinated by the inquiring spirit of children and strikes this note in his song on "the Land of Dreams." The child asks,

"O, what land is the land of dreams,
What are its mountains and what are its streams,
O, father, I saw my mother there,
Among the Lilies by waters fair:"

But the father regrets that he has not been able to extend his vision so far and realises that the child is always nearer the goal. But the child yet continues the enquiry,

"Father, O father, what do we here
In this land of unbelief and fear;
The land of dreams is better far
Above the light of the morning star."

Another thing over which Blake grows eloquent in his praises of childhood is its readiness and capability to appreciate Nature. So,

"It loves to rise on a summer morn
When birds are singing on every tree,

The distant huntsman winds his horn
And the skylark sings with it
Oh what sweet company!"

But the child does not study nature as it likes pleasure more than instruction. It sees on the face of everything it sees the sublime inscription, "God." But though children are not willing to receive any instruction, they are unconsciously instructed, and find an inexhaustible fountain of pleasure in every object they perceive and how often in our own homes have we seen them looking at the same thing for tediously long a time and how often have we cut short their unceasing inquiries about it for want of a proper answer. Children are endowed with the ability to perceive the greatest amount of beauty in things great and small, magnificent as well as insignificant. Thus by a community of feeling and thought, the children have created a homogeneous kingdom of their own, the necessary attainments for becoming subjects of which, we, grown-up men, do not possess. They have their own government and their own religion, and "God" is their king as well as their prophet. They mock at our class and caste distinctions and at our political and religious splits. It is because of this unity of allegiance that when one child meets another, a sudden emotion rises in the face of both, as if by way of mutual recognition. Blake grows eloquent over the praises of this child-dom and severely condemns any attempt to kidnap children from it and to place them in this secular and "rotten" society of ours. When he hears that a boy was punished for saying certain things against the religion of the realm, against what we, petty-minded people, call religion, he asks with indignation if such things are done on Albion's shore. Though their principles may be opposed to ours,

though they may run against the currents of our politics and our religion, he says, it is a sacrilege on that most High Altar to cry their ideas down or to counsel them to leave the sphere in which "He" has placed them. He says,

"He who mocks the infant's faith
Shall be mocked in age and death,
He who shall teach the child to doubt
The rolling grave shall never get out
He who respects the infant's faith
Shall triumph over Hell and Death."

It is because of this power of appreciation of Nature which gives to each and every one of them the same lesson, the same culture and the same training that we have this universal society of children. This power to appreciate, Blake calls noble and enjoins on us not to bar it by thoughts characteristic of this "clay mould" of ours, for,

"How can the boy that is born for joy
Sit in a cage and sing?
How can a child when fears annoy
But droop his tender wing,
And forget his youthful spring."

It is Nature again that is responsible for the optimistic philosophy of children who in the fashion of Edward Fitzgerald ask us to eat and drink to-day for to-morrow we may die.

Almost the same notes are struck by William Wordsworth years later on this harp of childhood. He had so much admiration for childhood that in his old age he often wished that those days would return. In him the thought of past years "doth breed perpetual benediction," and he often likes to talk of

"Sweet childish days, that were as long
At twenty days are now."

The one great thing about childhood that he often drives home to our mind is the very close affinity that subsists between the child and the Almighty. To him childhood embodies the idea of immortality, the children are conscious of it and he makes the cottage girl persistently argue out the fact that they are seven in all, though two of them in the churchyard lie. Even in his own childhood, he could not conceive of himself as a mortal being and hoped to be transported in person to the skies. He says that the child comes from God, its thoughts are always centred on Him, and it perceives everything in relation to Him; he says,

"The soul that rises with us, our life's star,
Hath had elsewhere its setting,
And cometh from afar:
Not in entire forgetfulness,
And not in utter nakedness,
But trailing clouds of glory do we come
From God, who is our Home
Heaven lies about us in our infancy!"

and later on addresses the child thus,

"Mighty prophet! seer blest!
On whom those thoughts do rest,
Which we are toiling all our lives to find,
In darkness lost, the darkness of the grave,

and finally concludes that it is one "whose exterior semblance doth belie its soul's immensity." He regrets the change into manhood, when "the shades of the prison-house begin to close upon the growing boy," and adds in the most pathetic terms,

"Thou little child, yet glorious in the might
Of heaven-born freedom on thy being's height,
Why with such earnest pains dost thou provoke
The years to bring the inevitable yoke,
Thus blindly with thy blessedness at strife?
Full soon thy soul shall have her earthly freight,
And custom lie upon thee with a weight,
Heavy as frost, and deep almost as life!"

He feels this loss with growing age very keenly and is conscious that,

"I have submitted to a new control:
A power is gone, which nothing can restore;
A deep distress hath humanised my soul.
Not for a moment could I now behold
A smiling sea, and be what I have been:
The feeling of my loss will never be old;
This, which I know, I speak with mind serene."

Once the poet informs his children of the approaching return of their mother. They fall into fits of joy and rejoice over it, though some days had to intervene before the actual return, then the poet realises that a child,

"Wars not with the mystery
Of time and distance, night and day,
The bonds of our humanity."

So the children exult as if there is cause for immediate joy. A few moments later they are quite asleep in their bed, the poet eyes them and is forced to exclaim at the great equilibrium of mind which children possess, unaffected by joy or grief. The children forget every matter connected with an object when once it is out of their sight and mind, for who could have supposed that these children so overjoyed at the approaching return of their mother could have slept so soon and so peacefully. No thoughts about the past or the future trouble them, their vision extends only to the immediate present. They do not discuss the reasons, nor do they speculate on consequences, they believe in and think on what is immediately before them. This is natural, for,

"A simple child
That lightly draws its breath
And feels its life in every limb,
What should it know of Death?"

The poet gives yet another story which is full of meaning. He asks his son whether he

likes a change of home to Kilve, while living at Liswyn farm, and promptly the son replies, "at Kilve, I would rather be than at Liswyn farm." The son gave this reply by way of pleasing the father who had much attractions towards his old home at Kilve. The father demands of the son the explanation for this preference, the son is pointless but on being pressed over and over again for a reason, looks up and finding a weather cock right up before him gives out that it is because there is no weather cock at Kilve. There is nothing new to us in this story, all of us in our childhood have often been forced to give such silly but noble answers. The father is struck with surprise at this answer and exclaims,

"O, dearest, dearest boy! my heart
For better lore would seldom yearn
Could I but teach the hundredth part
Of what from thee I learn."

The poet also, like Blake, illustrates the child's power to appreciate Nature. As a boy, he himself felt this power and many of his experiences coincide with our own in our humbler spheres. His heart leaped up whenever he beheld a rainbow in the sky. Often while a boy he held converse with the hills and lakes of Cumberland. Even here, it is not through eyes, but by imagination that child admires Nature. The blind highland boy was accustomed to listen to the roaring waves, so he formed the dangerous intention of crossing the ocean. Though he was blind, he had grown to like Nature so much that he did not think his intention the least dangerous, and self-confidence and courage flocked to his aid. One day as the result of the training which Nature has been habitually imparting to him, he actually put himself out to sea in a shell. This imagination is a foun-

tain of inspiration to all children and so it was to young Wordsworth. He feels in the closing years of his life how that imagination did intertwine for him the passions that build up our human soul :

"Not with the mean and vulgar works of man
But with High objects, with enduring things
With life and Nature, purifying thus
The elements of feeling and of thought
And sanctifying by such discipline
Both pain and fear.....
.....until we recognise
A grandeur in the beatings of the heart"

and how often "the earth and common face of Nature spake to me rememberable things."

I shall conclude Wordsworth's contribution to the poetry of childhood with these most magnificent lines :

"The thought of our past years in me doth breed
Perpetual benediction: not indeed
For that which is most worthy to be blest;
Delight and liberty, the simple creed
Of childhood, whether busy or at rest,
With new-fledged hope still fluttering in his breast
Not for these I raise
The songs of thanks and praise:
But for those obstinate questionings
Of sense and outward things,
Fallings from us, vanishings;
Blank misgivings of a creature
Moving about in worlds not realised,
High instincts before which our mortal nature
Did tremble like a guilty thing surprised:
But for those first affections,
Those shadowy recollections,
Which, be what they may,
Are yet the fountain light of all our day,
Are yet a master light of all our seeing;"

And now, before I finish, a word on the influence of childhood on home-life. Even to our purely secular eyes, children gladden our homes, without them our homes are like the Asramas of an Indian saint. By doing away with the gloomy aspects of life, they open for us the life's romance, they make light our work which without them would seem hard. Even Wordsworth alludes to this in the following lines, taken from his narrative poem, "Michael":

"that from the boy there came
Feelings and emanations—things which were
Light to the sun and music to the wind;
And that the old man's heart seemed born again."

But a child more than all gifts,

"Brings hope with it, and forward looking thoughts
And stirrings of inquietude, when they
By tendency of nature needs must fail."

A child also exercises a silent influence on the mental calibre of other inmates of the home. It could convert a harsh and stiff Silas Marner into a man of sympathies. Besides teaching us tenderness and sympathy, it takes us to the origin of things and thus imparts to us what in the bewildering maze of modern day conventions is a great lesson,—the lesson of simplicity.

I. P. NARAYANA MENON.

SOME STRAY THOUGHTS ON THE PLACE-OF MUSIC IN EDUCATION.

V.

"The man that hath no music in himself,
Nor is not moved with concord of sweet sounds,
Is fit for treasons, stratagems and spoils;
The motions of his spirit are dull as night,
And his affections dark as Erebus:
Let no such men be trusted."

I BELIEVE it was a mathematician who laid down the general proposition that the greatness of a country varies *directly* as the love of music of its inhabitants and *inversely* as the absence of pride in its language. I am afraid I cannot give you the exact reference to the mathematical treatise wherein is given a rigorous proof of this proposition, nor can I tell you by what processes of differentiation and integration he established its truth. I shall contend myself with merely enunciating the corollary which follows immediately from the above theorem.

The greatness of a Tamilian varies directly as his love of South Indian Music and inversely as his neglect of his mother-tongue.

VI.

Music is the index of the mind.

I have already recorded what happened in the Common Room between Mr. V. * * * and his colleague, the music master. The very evening, as I was starting home, I was accosted by the latter who asked me whether I could wait a few minutes for him. He added that, as he was going in the same direction, he did not think that I would object to his going with me. I replied that the road was as much his as mine, but as for waiting I had no objection that I could see. And from the preparations he made I could

understand that he was not going to leave me, at any rate, for some time to come. I half-guessed that he was going to talk to me about the afternoon discussion and I was confirmed in my opinion when he insisted upon my accompanying him to a coffee hotel on our way.

I may confess here that after being fortified with some lunch I was in a better mood to hear him. You may have observed teachers leaving their schools homeward in the evening and has it not struck you that they look so haggard and lifeless? Do you wonder that they do not mix freely in society? You say very often that they belong to the noblest of professions, but you as often forget that theirs is the sorriest of trades. It is not merely the pittance they get, but the fact that they are known to get only a pittance becomes the grave of all their hopes. It is not merely the endless rows of exercise-books of which it has been sung:

"Note-books to right of them,
Note-books to left of them,
Note-books in front of them,
Loomed and lowered,"*

not merely the slip exercises to be set, note-books to be corrected and examination papers to be valued, but the fact that after all they are regarded as "only teachers" whose wages can never exceed the smallest number of three digits, sends them to an early grave.....But it is neither here nor there.....And if I go off at a tangent it is the cheering, but not inebriating, liquid partly to blame.

"Don't you think that materialism is now rampant here?" said my friend when we were once more on our bikes. I should have told you that my worthy friend was a pen-worn veteran. He had made a dozen gallant

* With apologies to the parodying poetaster.

attempts to pass through the Strait of Babelmandah, but as many times had the "Gate of Tears" been closed against him: I mean he had failed in the Matriculation examination as many times as Mahmud of Ghazni had invaded India. His attempts were, however, not without some good result. Though he could not master figures enough, with every renewed trial he was growing more and more a master of letters, or as it is generally expressed, a "man of letters." He could talk to you on all the important literatures of the world and he had almost a prodigious memory—except, of course, for mathematics. Though he could not boast of a University degree, he could boast of a good pedigree and so his taking up the post of a music master was merely a labour of love. He was generally speaking a very well-informed man with whom any conversation or discussion was always interesting. You may wonder why that evening I did not court his company more than he did mine but you have my answer already.

I told you I was in a 'hearing mood,' and I must add I was, however, in no 'discussing mood.' Hence I did not reply to his question. But my friend went on:

"It is the curse of all importation: you stick to the letter and lose the spirit. You slavishly follow and then bitterly hate. The whirligig of time brings in his revenges. Your cry now is 'utility,' 'utility.' Presently you will cry yourself hoarse for 'culture,' 'culture.' 'Science' is your watch-word now and even at the same time you may see the flag of 'art' unfurling in the horizon."

Finding me rather reticent he changed his tactics and said, "By the bye, have you heard of the Eastern King who chose his ministers and officers according to the ragams which they could best sing?"

I answered in the negative and at the same time I could not but laughingly inquire, "Was he not a hyperbola?"

"Hyperbola? what is it? I don't understand you," said he.

"Every one of us," said I, "is an ellipse at the best. I mean every one of us has some amount of eccentricity. You know we call the figure an 'ellipse' when the eccentricity is less than one. If the eccentricity is more than one we talk of the 'hyperbola.' Your friend the king was surely more than a rectangular hyperbola, with eccentricity perhaps more than two."

"I do not quite understand your mathematical talk," said my friend, "for you know figures were never my forte. But I assure you that this king to whom I referred was no eccentric individual."

"If the monarch whose ministers were musicians was not eccentric, he must have been mad," said I.

"I never thought," said my friend quickly, "that you would speak like one of that school of Jingoos who can never understand the Eastern mind. I tell you that this king ruled over his country for more than thirty years and his reign was one of many-sided activity and progress."

If I had entertained a little pride over my superiority in mathematical knowledge, I now found I was at the mercy of the historian. So I wisely desisted from talking of "where," or "when" or "how."

He continued and drew a splendid picture of the prosperity of the country under those "musical officers" and argued at some length about the culture value of music. If Greek and Latin were considered as the qualifications of your statesmen and diplomatists, he wondered why music which is often spoken of as the universal language should not afford the necessary training. He went on:

"You know how the ancients fabled that music moved even rocks and stones. Music can tame the tiger and charm the cobra. Its range is infinite. Its possibilities are unlimited. Its scope for individual development is as wide as the universe itself. It can enter into the inmost recesses of the human heart and bring out the hidden secrets. It can console you, sustain you, elevate you and ennoble you. It can afford you a better

training than your Sanskrit or Greek or Latin."

Having by now come to the parting of the ways, he wheeled his cycle round and left me with a parting thrust, that "music is the best test of ability and character."

If I were a king and had to select my ministers just then, my choice would have surely fallen on musicians.

* * * "MARAT."

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MUCH ADO ABOUT NOTHING.

CAN it not be imagined by the present system of Education in India, that though higher educational ideals are put forth with scrutinizing exactness and firm resolutions in the curriculum, they are still not realized and it may be said that the system is almost proved a failure? We are under the British rule for one hundred and fifty years. These educational reforms have been introduced in India through the Western education since more than fifty years. And it may be seen through the perusal of the following pages that our educational system lacks something, that we are far from reaching our goal—the ideal and true education.

If we rely upon the various reporting educational agencies, though the reports have been made, on the strength, as a friend truly remarks, "of sixty p. c. of the report for the previous year plus twenty p. c. of what the head of the institution says plus twenty per cent. of water" it will be very easy to recognize that the majority of the subjects taught at present in the various schools and colleges are handled inefficiently, and the teaching is not up to the mark, in some cases it being considered a mere drudgery; all the powers and faculties of the students are not made to play all their parts properly. English is taught in such a way that many cannot write it properly, others cannot understand it clearly and still many more cannot talk and express their opinions fluently. Mathematics, though it has some utilitarian value in practical life, has been taught in such a way that after passing a certain examination, it has been put aside and forgotten altogether. Germany maintains its present prominent position against the mighty

forces and the successful attacks of our great Allies and it has been said that its barbarous valour and its present success, if there be any, are truly the outcome of the efficient scientific investigations and teaching. The science teaching, which is a powerful weapon to enrich a nation and a weapon which will put a nation on par with any mighty highly-renowned and powerful State in the world, is never taught here efficiently and in its true spirits. It is in its cradle, though there is a general cry from educational authorities and others to teach it in its various aspects and true spirits. It will also be seen that the teaching of History and Geography which is no less important and is the true basis of strengthening and moulding the character of a nation, is found still more a neglected factor. These subjects are given to cram and no true training has been accorded to students. Vernacular is never properly taken care of and is altogether neglected as a broken piece of glass. It is a babe, neglected in his own family from his early babyhood.

Why this justice to India and the Indians? Are the reasons very far to be sought? No, indeed no! It is the very tree of the Education Department that has been eaten up to the roots by the worms. From top to bottom, from head to foot, the tree is putrefied and withered. The Educational authorities select their homes in one corner of the country and pay visit to a particular institution once a year or so. The fact is previously published and the managing bodies hasten to make at once such alterations and changes both in teaching and the staff as far as possible which are liable to attract the notice of the distinguished visitor. In spite of these changes and alterations if the things are not found to the satisfaction

of the visitors, several excuses, true or false, are put forth without the least hesitation. These visitors or Inspectors come and go, give some oral directions and instructions, forward a report showing some of the defects in the building, teaching and the general organization of the school and the matters end. Is it not advisable that these people ought to see that their directions and instructions are fully carried out? If not, why should they not show personally how to carry them out? When they find fault with a particular method of teaching, they ought to manage to give some demonstrative lessons personally and show the teachers the advantages and the method of handling a particular lesson, they wish these teachers to follow. Verbal hints are never fully carried out and therefore the urgent necessity of practical demonstrations. This is the reason why many of the certificated teachers are unsuccessful in handling the lessons by the most reformed methods. These methods are highly recommended and the authorities want them introduced and carried out successfully in each and every institution. No doubt these methods have many advantages, but it must be seen side by side that each and every kind of facility is highly essential for both the teacher and the taught to bring forth splendid results. The utter failure of these methods can be better imagined than described by the present state of things.

Some head-masters, very vain and proud of their learning and knowledge, often frustrate the true ideas and good methods of some of the members of their staff, by interfering every now and then in their teaching. Sometimes it happens that these eccentric heads misguide the true channel of the teaching spirit of the class. These heads come with thousand and one new devices and introduce them untimely and spoil the true

aim or spirit of teaching which the poor humiliated teacher might be carrying on successfully. It might be far more advantageous if these head-masters talk to their teachers privately and ask them to introduce any new device if they find it reasonable and worthy to be taken up. But these Head-masters or Principals, as they are called, would not listen to the humble requests of the teachers and would like to follow their own way however impracticable and undeliberate it might be. Such people, who hinder the true work of teaching and thus degenerate the very name of Education and who goad teachers every now and then under false pretexts and thus spread the plague of discontentment among the staff, must be found and rooted out, however firm and high their positions among the public be. Truly they are the agencies that mar and degenerate the progress of educational work.

Besides this, there are various causes that make the life of a teacher very humiliating and miserable. The life of a teacher in India is not worse than a teacher in Great Britain. Mr. Herbert Fisher in his recent report remarks:—

"But, after all, you will never seriously raise the level of our teaching either in our country schools or in our town schools until the country learns to pay the teachers better and not only to pay the teachers better but the teacher must never be allowed to go to rust. I think that one of the serious defects of our educational system is that when we appoint a teacher,—we are apt to think that our responsibilities towards the teacher have apparently ceased; but it is quite as important that the teacher should continue to educate himself as he should continue to educate the children. For, depend upon it, as soon as the teacher winds up the living mind within him, his utility as a teacher begins to

cease. I say, then, **KEEP THE MINDS OF YOUR TEACHERS ALIVE**.....If then you want to get good teaching.....pay them a wage worthy of their ability and when you have got them keep their intellect alive."

Thus we see that unless the status of teachers is highly improved and bettered, our present educational system will never thrive.

To the above facts we may add that private enterprizes ought to be encouraged. To spread education among the people, rich and poor, low and high born alike, every effort ought to be made both by the Government and the general public. Liberal educational principles must be taken into consideration. Schools on national principles for various branches of arts and sciences must be established and maintained liberally. Elementary and Primary education to be received by all, must be free and compulsory. Secondary and higher collegiate education ought to be less costly and accessible for rich and poor all alike. Above all it must be urged to introduce religious and moral education in the present curriculum. For its importance we will but quote a few words of the great educational reformer Pestalozzi:—

"To get out of these all, one needs for life and enjoyment, to be patient, painstaking and in every difficulty, trustful in the Love of the Heavenly Father.....Nothing concerns the human race so closely and intimately as God. Belief in God, which, a part of our nature, like the sense of right and wrong and the feeling, we can never quench of what is just, and unjust, must be made the foundation in educating the human race."

Now we may conclude that as long as these evils are not removed perfectly and per-

manently, we will never enjoy the sweet fruits, the true educational system breeds and intrusts to the nation; and till then, we cannot help but say in the wording of Shakespeare that our educational system displaces.....
Much Ado About Nothing.

H. C. SHAH.

THE WATCHED KETTLE.

Are you waiting for something? Don't look
at the clock—

That horrid thing on the whitewashed wall.
You never shall hear the postman's knock,
And those hands, they will not move at all.
Has the spring run out? Does it want more
oil?

No. If you watch the kettle—it will not boil.

Yesterday went off nicely, and well:
Rejoice, and be thou glad to-day.
To-morrow?—Where?—Ah! who can tell?
May be beyond the Milky Way.
Don't look the Fates too hard in the face;
Enough that you know there's an end to the
race.

All good things come plumb down in the
midst of toil—
But watch the kettle—it will not boil.

Has anyone yet found gladness, and mirth,
Who panted, and struggled for happiness?
Has anyone found where the sky and the
earth
Meet far on the plain, or the hill's recess?
Be happy to-day—there's nothing to spoil—
But don't watch the kettle—it will not boil.

Count not the days—they will soon go by—
Or they'll come not—those Christmas
Holidays—

And Fame?—Will it come?—You'll be done
in the eye—

THE PIPAL TREE.

Dry is the grass on hill, and plain,
All round the fields are bare,
And winds that come before the rain
Carry the dead leaves here and there:
But much to feel, and much to see,
While sitting 'neath the pipal tree.

A flock of parrots wing their way
Across the cloudless blue,
And starlings, chattering on the spray,
Fling down a fig, or two—
You birds, have you nothing more for me
While sitting 'neath the pipal tree?

Here in this very spot where I sit
Is the centre of earth and sky;
E'en here may I feel the Infinite
In the moment passing by—
But may not express what came to me,
While sitting 'neath the pipal tree.

B. G. STEINHOFF.

PARTING WORDS.

O there are spirits of the air,
Though hidden from our view;
They gently whisper in our ear—
Be good—Be true.

The selfsame spirits at our birth
Have by our parting stood,
And whispered, when we came to earth—
Be true—Be good.

The way grows long and treacherous,
The world a pathless wood;
Their whisper is not heard by us—
Be true—Be good.

But still at times the murmur rings—
Sure once we heard it too,
When ushered in this world of things—
Be good—Be true.

B. G. STEINHOFF.

EDUCATIONAL IDEALS.

(Continued from p. 277.)

II

NOR is this all. If he steps out he finds himself amidst people who look upon him as a wonderful and mysterious being. A stray telegram comes from Colombo or Singapore from one who left his native shore in search of employment. And mystery of mysteries, bringer of bad news, baffling strokes that scare like bones, dumb messenger! To whom would he speak? Who has the key to the zero? "The little *Englishman*, take it to him, where is he?" A bright thought and it is obeyed. The message is read and the *Englishman* at once becomes a hero by this single feat of his marvellous powers.

Vividly I remember how at the close of the last century, a student of our village was very near to being solemnly deified and that, to my mind, for the best of reasons. In those days telegraphic messages transmitted much of their electricity through the luckless hands whereon they lighted from the non-conducting pockets of the outlandish peon. These electric shocks invariably drove the artless owners of those hands to thunderstruck dumbness or to horrid convulsions and thundering cries. It was during this epoch of our national history that a poor old woman of our village was subjected to the unrelenting devilry of an electric message. With shivering frame and numbing anxiety she took the obnoxious and yet unpenetrated envelope to an elderly gentleman who had pretensions to a smattering of English. He dexterously removed the wrapper, took out the chequered sheet and applied his knowledge to it with an omniscient lexicon for an assistant. He looked at the sheet, looked at the woman, and then his head bent down and pondered, and, at last, with a deep heave, he burst into tears. Alas! her daughter had died, her only daughter, the charming girl who dwelt far away with a thriving relation. The promising "English-learner" of the village on whom many a bright hope had been fixed, ran to the spot to know the cause of that loud dismay. Catching the flying message which had by this time, been thrown to the winds, tattered and torn, in revenge, he read it and exclaimed, "The girl is living! the girl is living! Rejoice! she has attained her puberty." Oh, Hercules of our village, why didst thou refuse to become a god?

In this century, however, our students do not get such lucky chances to revive the dead:

yet the sort of environs in which the pupil from the countryside spends his holidays are even to-day eminently fit to turn his head and lead him on to pernicious self-glorification. It is something like squint-eyed kingship in blind-land.

"Spare the cane and spoil the child" is fast becoming obsolescent but "Flatter the child and spoil him" is, I think, still a truth. None is more likely to be spoiled by flattery than the boy from the country-side. The barber flatters him in the midst of his tonsorial activities and he gets his extra copper for his unstinted adulations. The washerman more regularly visits him than he does others. The servant pays him punctilious attentions. The father is impatient to see his son in good circumstances but that is all: and the mother sees in him the embodiment of all her hopes. If the boy has an understanding mind, he will strive with all his might to realize the hopes so hopefully formed of him, to deserve all the flattery so cunningly showered on him. But such an understanding mind is not very common and the flattery and the hopes only show him the way to go to the dogs. The teacher who does not see the Beyond that lies outside his class and from where his pupils come may wonder what undoes his work. He cannot prevent the undoing by any efforts that he might make from within the four walls of his class-room.

I think I have already said much about examinations. I shall not again condemn or praise them, for what I might say can little shake them. They have long established their rule and we are not able to think of our schools and colleges apart from examinations. Who can think of the education given in a

first-grade college without at the same time thinking of the Intermediate, the B. A. Pass or the B. A. Hons. examinations? Well, these examinations will have all our time, all our boys' time. They will have, if possible, all our ideals thrown into the sea and vainly would you plead for mercy, for relaxation. It is like poor old Shylock inhumanly asking for his pound of flesh. A Portia must come to examine these examinations. The mischief that is being wrought by them is appalling. In teaching the boys with a view to secure them certificates, we are really depriving them each of a pound of flesh—of something much more valuable than certificates—a fully developed character which is the prop and joy of life. But we must not sit idle awaiting the coming of a Portia to help us. We have to seek for remedial measures to counteract the force of home-influences and environments when they are bad, to lessen the evil of the almost inevitable examinations, so that the boys may receive all that they want, so that we may give the best we can give.

Where the father or the guardian is uneducated and what is worse, does not care for education, there the boys have a splendid opportunity to spoil their teacher's work and so to spoil themselves. If every parent or guardian is a lover of culture, the evil would not exist. It will exist till the condition is fulfilled. Meanwhile (which, by the way, would be a long while) some remedy can be suggested, which, though not radical, is largely palliative. It is "Be a friend of the father or the guardian." Let not the teacher think that at 10 o'clock the boys drop down as if from the heavens with regulation coats and caps. Let not the guardian think that at 10 o'clock the teachers shoot through space

into the unknown regions of the class-rooms. The teacher, the pupil, the guardian, each one of the trio belongs to *terra firma* and as such may easily know one another. Perhaps, most teachers know that they are the guardians of the pupils in the school but, perhaps, most guardians do not know that they are the teachers of the pupils in their homes. Let this fact be well impressed on them. Further the teacher can make capital out of the guardian's mania for Government employment. If ever the guardian is to reach his goal, he must properly control his ward. Let the teacher tell him this plain truth, for, by doing so he can secure effective co-operation in his arduous task. If, however, he keeps aloof, the cathedral that he patiently and persistently rears during day will be demolished at a stroke during night. The truth must be spoken to prevent the vandalism.

We are, then, not quite powerless to save the fruits of our labour. We must have fruits worth saving. But amidst the scramble for information, amidst the anxiety to satisfy the cravings of examinations, the very meaning of culture is often forgotten. It is something like the "marriage in the bigwig neighbour's house." In the bustle and hurry of unceasing festivities, nobody minded the marriage at all and the auspicious hour passed away unheeded. It was all festivities and no marriage. While we educate, we miss education, at least a large part of it—character.

An old boy tells me a quaint story. Once his teacher took it into his head to study the proprietary qualifications of every one of his pupils. One of them on being interrogated, stood up and said, "Sir, I am a landlord." Days afterwards the teacher stepped into a coffee-club in the street and finding

his landlord-pupil there, asked him who its proprietor was. The boy, though not quite sure who it was, indifferently pointed out one as the probable person. All the world knew that it was his father who had taken to this trade to educate his pretentious son. The teacher did not long remain in ignorance. Henceforth the boy became the "Lackland landlord" of all who knew him. This is not so much an instance of deliberate mendacity as of moral cowardice. It is puerile, laughable megalomania but for all that, it is a defect in character. We do not want asses to tire themselves in tiger's garbs. I remember an instance of the opposite kind. A student goes to the headmaster of a school seeking admission into the VI Form.

The Headmaster: "Why do you want a change of school?"

The Student: "Here lives so and so, a distant relation of mine: he is willing to help me and I am impecunious."

There is nothing superb in such a confession. But such little things are of the highest importance to the teacher. They give what nothing else can give—an insight into character. They are the clue not only to a proper diagnosis of the class but also to the therapeutics of each differing ailment. Teachers have to be as much doctors and nurses of moral disease as they are feeders of intellectual hunger.

There are other means too of forming or correcting character, if only one would look for them. As the old proverb has it, if the jack-tree wills, even the roots will begin to bear fruits. History and poetry are full of ideals and examples that would stir any mind. Such lines as

"The boy stood on the burning deck
Whence all but he had fled,"

or

"Shoot if you must this old grey head
But spare your country's flag....."

or

"How can man die better than facing fearful odds
For the ashes of his fathers and the temples of his gods."

Whom would not these lines move? Whom would they not give impulses that abide? The boy whose mind is not moved by the "Boy who stood on the burning deck" is too abnormal for the pedagogic art. Story-poems so full of action and sentiments and so serene are of inestimable value. The teacher and his class must cast away, while doing these poems, cares of passing and promotion. Teaching them piecemeal, phrase after phrase, line after line, with the aid of rhetoric and grammar, is like hacking a beautiful living organism. Our greatest poet tells us how once "the sight of an amputated leg upset him altogether" and how "to view man in that fragmentary way seemed to him so horrid, so absurd that he could not get rid of the impression of that dark, unmeaning leg for many a day." To amputate a leg to save life may be very good ethics but I have my own doubts as to the virtue of dissecting a poem even for the sake of teaching it. The end does not justify the means. As to history, it is not much unlike poetry and many an erring youth can be reclaimed by that subject, "could we tell it right."

The personality of the teacher is another thing that influences the formation of character. Therein the boys look, as in a mirror, for ideals of conduct, for sense of right and wrong, for guidance, in short for everything they wish to follow. To them he is history and poetry, mathematics and all,

and being so, he has to take up the work of the master-mason in any scheme of character-building. His responsibility is, indeed, heavy. May the world realise his position and give him his due!

It is clear, then, that in spite of various difficulties, much might still be done to character. I have devoted so much time and space to this topic because nothing seems to be so important to those who are engaged in the education of the young. Character, undoubtedly, is our greatest ideal. It may not be possible to realise it in its entirety but that only shows its superlativeness. Even a partial realisation, in this case, is the very height of achievement. It is an ideal indeed. And there are a few more and though some of them come under character in its widest sense, none would grudge them the honour of some independent space.

One such ideal is veracity. He must have been very clever who invented the lie. If he had patented his invention he could have treasured up a large part of the world's wealth in his coffers. However, he chose to die in poverty rather than to set a price on an article of such universal usefulness. He, I dare say, is the world's greatest philanthropist but by a strange irony of fate, nobody knows anything about him. It is certainly the pious duty of those who benefit most by his invention to recover his lost fame. But as it is, his name and his fame are irrecoverably lost. I believe that to accept a gift without knowing its giver is not good morality. We must not lie till we come to know the first liar.

May be, this is queer reasoning. Anyhow, we know that our forefathers had a very high respect for truth. Our philosophers, our

saints, heroes and poets spoke, if they spoke at all, the truth, the whole truth and nothing but the truth. In these hard times it is not perhaps possible nor even desirable to give publicity to all that one knows to be true. There is not any great harm in following our greatest law-giver who rules, "Say what is true and say what is pleasant but do not say what is true and unpleasant nor what is pleasant and not true." Let every man be a law unto himself as to when he should speak the truth and when hold his peace. But in this matter our boys should not be allowed such latitude, for most of them will not have reached so advanced a state as to resolve not to speak falsehood. *Vincit omnia veritas* must be their rule of conduct. It is unnecessary for teachers to preach about worldly-wisdom. It is unnatural for boys to be worldly-wise. They should, therefore, speak the truth, though it is unpleasant or harmful.

So far about truths. What is more important for us is the question of lies. There are a hundred untruths for a single truth and every time we speak we are in danger of uttering a lie. Happy is the man who does not fall a prey to the dangerous temptations of lies. Many are not happy in this way. Verily, so bewitching are the allurements of lies that men have accepted some of them and called them venial lest every man should have the burden of an epitaph on his head bearing the opprobrium, "He is a liar." To distinguish between lies and lies is, no doubt a very charitable and necessary act. We shall with due deference to those who have gone before us uphold all the differences between black lies and white lies, big lies and little lies, bitter lies and sweet lies, vicious lies and what not? but, while doing

so, we cannot accept the hypothesis that any one of them is pardonable nor would we pardon any in our little school-world. Very uncompromising: yes, for, see what otherwise happens. A man who utters a lie un-awares or out of seeming necessity may repent of his action and avoid, if he be a man of sufficient self-control, all future lying. A boy who takes the school discipline on his head naturally finds lying far more useful than truth-telling and if he lies and is let off scot-free, he is not likely to be ever afterwards captivated by truthfulness. He begins with a small lie or an excusable one, his second lie would be less so. By the time he makes his third lie, he would have gained some proficiency in the art: he thus becomes the bolder and cleverer the more self-confident he grows till at last lying becomes a matter of habit with him and he lies like a gas-meter.

Fear is the root of these lies. It is the fear of penalty for an untoward act of commission or omission that induces a boy to lie. The denial of what one has done and what one has not done are two species of falsehood very attractive even to men and so attractive to some boys that they oftener than not fail to resist falling a prey to it. Let us take an instance. One commits a breach of discipline by one's garrulousness. The teacher observing it asks the boy why he was talking. He stands up with a start and pleads innocence. Such conduct baffles understanding, even the understanding of its ingenious author. He soon sees his folly and is abashed. We may call it an instinctive lie as distinguished from a deliberate one. It shows an innate propensity rather than a premeditated method. There is a vague fear of punishment

attached to talking during a lesson. The talker tries to dodge the punishment by a lie. He does not trust to reason; on the other hand, he is guided by some instinct of cowardice, for reason would never counsel a musty lie. In fact all silly lying of school-boys can be traced to fear and unreason which fosters fear.

Instances of untruthfulness are, however, few and far between in our schools. This is a very healthy sign of which the teachers and the taught can rightly be proud. No true Indian will be mendacious, whatever be the cost of truthfulness. No student will grow up as a liar if he is properly taken care of.

In the history of our modern education, there was a time when teachers were known as school-masters. Now, the term master implies slaves or servants. There is little cause for complaint if school-masters acted up to the meaning of their appellation. There is no cause for wonder, if during their regime, backsliders were not a sporadic phenomenon. We must not expect a boy to speak the truth before a tyrannical teacher. Frightfulness never succeeds in stamping out evil. It only aggravates the evil. The teacher who frightens a boy with the very good intention of bringing him round to truth-telling finds, ere long, that he has spoiled the boy and made him a liar.

(To be continued).

N. K. VENKATESWARA AIYER.

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SENATE MEETING.

A meeting of the Senate was held on Friday, the 19th instant, in the Senate Hall at 4-30 P.M. with Sir P. S. Sivaswamy Aiyar, Vice-Chancellor, in the chair. About sixty Fellows were present.

On the motion of Mr. Littlehailes, seconded by Mr. Statham, it was resolved that item No. 18 on the agenda be taken up for consideration after item No. 6.

SYNDICATE'S REPORT.

The Report of the Syndicate for the period extending from 1st August 1916 to 31st July 1917 was recorded.

ORDINARY FELLOWS.

On the motion of Mr. B. Hanumantha Row, seconded by Mr. C. P. Ramaswami Aiyar, the following Ordinary Fellows were assigned to the respective Faculties as under:—

Faculty of Arts:—The Raja of Pittapur and H. E. the Governor of Pondicherry.

Faculty of Law:—The Hon'ble Mr. Justice V. M. Coutts-Trotter.

EXEMPTIONS.

Mr. W. H. James moved, and Mr. B. Hanumantha Row seconded, that exemptions from attendance certificates be given to certain candidates appearing for the Intermediate, B. A. Degree, L. T. Degree, B. L. Degree and Oriental Title examinations. This was carried.

ARRANGEMENTS FOR EXAMINATIONS.

The Senate approved of the arrangements made by the Syndicate to antedate the Intermediate, F. E., B. E. and B. L. Degree Examinations and to alter the time-table of the B. L. Degree Examination of October 1917.

ENGLISH TEXT-BOOKS FOR THE INTERMEDIATE.

Mr. Mark Hunter moved for the deletion of the words "immediately after the publication of the results of the Matriculation Examination" in the following regulation relating to books for non-detailed study for the Intermediate course in the English language:—

The books which are not to be studied in detail shall be prescribed every year immedi-

ately after the publication of the results of the Matriculation Examination.

Such a provision, Mr. Hunter said, had been a dead letter from the beginning. The books should be prescribed sufficiently early.

Rao Bahadur K. Ramanuja Chari seconded the motion, which was carried.

On the motion of Mr. Hunter, seconded by Mr. C. P. Ramaswamy Aiyar, the Intermediate Examination was pushed back two days, namely, from Thursday to Tuesday.

SYLLABUS FOR MATHEMATICS FOR B. A. COURSE.

Mr. Hanumantha Row moved to substitute a fresh syllabus for Mathematics for the B. A. course for the existing syllabus. The fresh syllabus included calculus and lightened the course in other subjects.

Mr. Littlehailes seconded the motion which was put to the meeting and carried.

ALTERATION IN TIME-TABLE FOR B. A. MATHEMATICS EXAMINATION.

Mr. B. Hanumantha Row moved for certain alterations in the time-table for the third, fourth and fifth days in B. A. Mathematics Examination.

Mr. A. Rangaswami Aiyangar seconded the proposition.

Mr. Littlehailes said that the syllabuses for the B. A. and B. Sc. examinations were practically identical, five out of the six subjects being common to both. The subject might be referred back to the Syndicate for further consideration so that the Syndicate might, in consultation with the Board of Studies, bring forward a time-table for the B. A. and B. Sc. which would effect the saving of time and money.

Mr. B. Hanumantha Row said that the B. Sc. examination was not in existence. When that was brought into existence he had no objection to alter the time-table. He wanted that this time-table should be brought into operation in 1918.

Mr. Hodgson suggested that the consideration of the subject could be deferred till the B. Sc. course was passed.

Mr. Littlehailes' amendment was lost and Mr. Hanumantha Row's proposition was carried.

On the motion of Mr. Hanumantha Row, seconded by Mr. C. P. Ramaswamy Aiyar, the Senate resolved that these alterations would take effect from July 1918.

On the motion of Mr. Littlehailes "Theory of Statistics" was added to the list of subjects (II) out of which any two should be taken by a B. A. Honours student at his option.

FINAL EXAMINATION IN HONOURS.

On the motion of Rev. Father Bertram the following temporary regulation was adopted:—

In the case of B. A. (Honours) students, who have enlisted in the Indian Defence Force, the period of time within which they shall appear for the Final Examination in Honours be extended to the end of the fifth year after passing the Intermediate Examination.

B. A. (HONOURS) COURSE, BRANCH IV.

Rev. Dr. Skinner moved and Mr. Justice Seshagiri Aiyar seconded a proposition requiring students in the first examination to have a knowledge of both psychology and ethics and providing for a college certificate in those subjects instead of a public examination certificate.

Mr. H. J. Allen moved an amendment to make the regulation simpler and this was accepted by Rev. Dr. Skinner. The resolution was carried. Other resolutions to make consequential alterations in Regulations 207 and 208 were also carried.

L. M. & S. AND M. B. & B. S. DEGREES.

On the motion of Lieutenant-Colonel Miller, seconded by Dr. Chandrasekhar, certain alterations were made in Regulations 294 and 294-A, relating to the L. M. & S. and M. B. & B. S. Degrees.

FAILURE IN INTERMEDIATE EXAMINATION, 1916

The Syndicate's correspondence with the Boards of Studies on the question of the revision of the Intermediate course of study in view of the failures in the Intermediate Examination 1916, was recorded by the Senate.

B. SC. AND B. A. DEGREE COURSES.

The report of the Committee of the Senate appointed to draft regulations providing for courses of study and examinations in science, that it would not be possible for instruction being given in science subjects both for the B. Sc. and the B. A. Degree courses in the same college without considerable increase in staff and accommodation, was recorded.

On the motion of Dr. J. L. Simonsen, seconded by Professor Fyson, alterations were made in Regulations 71, 87, 99, 106, 116, 117, 179 and 180, introducing the word "Science" everywhere.

Certain regulations for the B. Sc., B. Sc. (Honours) and M. Sc. Degrees in accordance with the general principles adopted by the Senate at the last meeting were moved by Dr. Simonsen. He said that there were not many points on which controversy was likely to arise and that Mr. Seshu Aiyar might bring his amendments before the Board of Studies first and then before the Senate at the next meeting.

Draft Regulations 1 to 10 were carried unopposed.

Dr. Simonsen moved Draft Regulation 11 which ran thus:—

"No candidate shall be declared to have passed Part I of the examination unless he obtains not less than 40 per cent. of the total number of marks. No candidate shall be declared to have passed Part II of the examination unless he obtains not less than 40 per cent. of the total marks, and not less than 30 per cent. in each of the three selected optional branches of knowledge."

Mr. Seshu Aiyar's first amendment to change the figure 30 into 25 and his alternative amendment to insert at the end of the last sentence the words "or not less than 40 per cent. in each of the two of the three selected branches and 25 per cent. in the third" were both lost after considerable discussion.

The original resolution was put to vote and carried.

B. SC. HONOURS COURSE AND EXAMINATIONS.

Dr. Simonsen accepted Mr. Seshu Aiyar's amendment to insert the words "in the case

of students taking iv, v or vi as the main subject" before the words "shall be the same" in the Draft Regulation." The course of study in English and in the subsidiary subjects shall be the same as for the B. Sc. Pass Degree." Regulation 1 and Regulation 2 as amended were carried.

Mr. Seshu Aiyar withdrew his amendments to certain details in the Draft Regulations relating to the course of study in Mathematics as the Vice-Chancellor assured him that there was no objection to any change when the matter would come before the Board of Studies.

Draft Regulations relating to Physics, Chemistry, Botany, Zoology and Geology except a few were put to the Senate and carried.

One of the regulations was "A candidate who is taking one of the three subjects, Botany, Zoology or Geology as his main subject may (shall be required to) appear for the examination in the subsidiary subjects at the end of the second year of the course."

Dr. Simonsen explained that the word 'may' was a printer's error and the brackets must be struck off. It was not intended to be permissive.

Mr. Seshu Aiyar moved to delete the brackets and the words "shall be required to" and said that the word "may" was preferable.

Mr. K. V. Rangaswamy Aiyangar seconded the amendment.

Professor Fyson said that if they allowed three years, they would lower the standard and spoil the Honours course.

The Hon'ble Mr. J. H. Stone said that there would be some cases in which students might be legitimately allowed to appear at the end of the third year. He was very much inclined to support Mr. Seshu Aiyar's amendment. The Syndicate might grant exemptions.

The amendment of Mr. Seshu Aiyar was carried.

The next amendment of Mr. Seshu Aiyar was consequential and was accepted by Dr. Simonsen.

Dr. Simonsen also accepted another amendment of Mr. Seshu Aiyar.

Dr. Simonsen moved and Professor Fyson seconded the following Regulation:—

11. A candidate for the B. Sc. (Honours) Degree shall appear for the final examination in Part II not later than the end of the fourth year after he has passed the Intermediate Examination in Arts and Science.

Mr. Seshu Aiyar moved that the words 'provided that there is no such time limit in the case of candidates who appear for the examination as provided in para. 10 above,' be added at the end and explained that his object was to show some difference between the B.A. Honours and B.Sc. Honours.

Mr. K. B. Ramanatha Aiyar seconded the amendment.

Mr. Mark Hunter pointed out that the time taken to take the Honours Degree was essential.

Mr. K. V. Rangaswamy Aiyangar said that the Honours test was only a time test and did not show that the candidates possessed greater ability than others who had taken the M. Sc. Degree and suggested that Mr. Seshu Aiyar might withdraw his amendment. There was not going to be a difference in standard. Mr. Mark Hunter and others wanted to use the word Honours in a technical sense.

The amendment of Mr. Seshu Aiyar was lost.

Mr. Seshu Aiyar then moved the following alternative amendment, the object of which was to give a year of grace to candidates who appeared for the B. Sc. examination (Honours.)

"That the words 'and not later than the fifth year after passing the Intermediate examination in the case of candidates who appear for the examination under the provisions of para 10 above' be added at the end."

Mr. G. A. Natesan, in seconding the amendment, said that nothing would be lost by extending the time.

Mr. K. V. Rangaswamy Aiyangar, in opposing the amendment said that the University must be consistent.

The amendment was lost and the resolution carried.

Dr. Simonsen accepted the remaining amendments of Mr. Seshu Aiyar, and the regulations as amended were carried.

Dr. Simonsen's resolution "that the new courses in science come into operation from July 1919," was also carried.

To allow of common papers being set for both the B.A. and B. Sc Degree examinations in as many subjects as possible, Professor Fyson moved to add to Regulation 196 the following sentence:—

'In the case of Part II of the examination the date of the first day of the examination in each of the optional groups shall be determined annually by the Syndicate and shall be notified in the 'Gazette' in the month of February.'

Regulation 196 runs thus:—

The examination for the degree of Bachelor of Arts shall be conducted in the order of time and subjects set forth in the following tables, and the number of marks assignable to each subject shall be as therein specified.

The motion was carried.

Professor Fyson then moved for the deletion of Physical Science and Natural Science in Regulations 198, 207, 208 and 209.

Mr. Seshu Aiyar opposed the motion and moved that the matter be referred to the Syndicate for necessary action.

Mr. K. B. Ramanatha Aiyar seconded the amendment.

Mr. Allen opposed the amendment and said that the question had been discussed in the Committee which was the proper body to deal with it.

Dr. Simonsen said that they did not want B.A. Honours in Chemistry and B. Sc. Honours in Chemistry, because there would be no difference between the two.

The amendment was lost and the original proposition was carried.

Professor Fyson moved and Dr. Simonsen seconded to delete optional subjects Nos. 6 to 11 in Regulation 207 under (i) Mathematics (c).

Mr. B. Hanumantha Row opposed it.

Mr. Seshu Aiyar moved that the matter be referred to the Board of Studies in Mathematics.

Mr. R. Swaminatha Aiyar seconded this amendment.

Mr. K. V. Rangaswamy Aiyangar supported the amendment and said that the object of Mr. Seshu Aiyar was to make the B.A. Honours Degree more coveted than the B. Sc. Degree.

Mr. Seshu Aiyar's motion was carried.

AMERICAN COLLEGE, MADURA

On the motion of Mr. Mark Hunter, seconded by Mr. K. V. Rangaswamy Aiyangar, the Senate recommended that the further affiliation of the American College, Madura, in Urdu under part II, Group iii of the Intermediate courses might be granted by Government.

On the motion of Mr. H. Davis, seconded by Dr. Simonsen, the meeting was adjourned to 4-30 P. M. to-day on the 20th instant.

The adjourned Senate Meeting was held on Saturday the 20th instant at 4-30 P.M. with the Vice-Chancellor in the chair. The whole evening was taken up in the discussion of revised regulations for titles in Oriental learning.

Mr. S. Kuppuswami Sastri, in moving that the revised body of regulations for titles in Oriental learning (twenty-five in number) be adopted and substituted for the existing regulations made an exhaustive speech tracing the history of the subject from the very beginning. He said that it might appear strange that the revised regulations in the shape of propositions stood against his name in his individual capacity as a member of the Senate. He had been waiting for the past three years and expecting all along to move the resolution on behalf of the Syndicate as a proposition recommended by the Syndicate. He would explain what led to the revision of Oriental Titles regulations so soon after their coming into operation. This University had been in existence for the last sixty years and it was only just half a decade since the

Oriental side of the University was established. The experiment regarding regulations for titles in Oriental learning had not yet been tried sufficiently well in all the various institutions in the Presidency.

On the 12th October 1914, he was informed by the Registrar of the University that a Committee had been constituted by the Syndicate to revise the said regulations and he was invited to serve on the Committee and to be its convener. The purpose for which the Committee was constituted was clearly defined in the Registrar's letter. The Committee consisted of members who were in one sense or other experts in matters relating to Oriental learning. Along with that Committee and to assist it in its deliberations particularly with reference to Dravidian languages a body of referees was constituted. The Committee held its first meeting on the 25th February 1915, at which the suggestions of the members of the Committee and of the referees were duly considered and discussed. The sittings of the Committee were unduly long and there was calm and patient discussion of all the suggestions. On the 24th May 1915, there was another meeting of the Committee. In the interval between the first and the second meeting a reference was received from the Director of Public Instruction regarding the question of recognising some departmental test (admission test) for candidates seeking admission in Colleges for Oriental learning. That was also placed before the second meeting and considered. A large number of details were carefully discussed at that meeting. The meeting also considered and passed a draft report of his, containing certain suggestions for revising the regulations for Titles in Oriental learning. That report in its final form was submitted to the Syndicate on the 27th July 1915. The Syndicate dealt with the report and passed a resolution. The report was sent back to him to be referred to the various Boards of Studies. The Committee again met on the 9th October 1915, to reconsider the report, and a further report was submitted on the 19th November 1915. This and the previous report were referred by the Syndicate to a Committee of the Syndicate consisting of Messrs. Hanumantha Row, Ramunni Menon

and Mark Hunter. He got from the Syndicate a reference to the effect that Sanskrit should be a compulsory subject and there should be two examinations for Siromani and Vidwan titles. Most of the principles involved in the revised regulations had been accepted by the Syndicate. In that reference he was called upon to redraft the revised regulations in consequence of the suggestions made by the Syndicate and keeping in view the principles approved by the Syndicate. He prepared a revised draft and submitted it to the Syndicate who referred it to a Committee of the Syndicate consisting of Messrs. K. Srinivasa Aiyangar, Mark Hunter and himself. Mr. Hunter suggested certain rearrangements and verbal modifications. At the close of the meeting he, the speaker, carried with him the impression that the Committee approved the revised draft with those verbal modifications, re-arrangements and re-adjustments. He noted the suggestions and submitted another draft to the Syndicate. Finally he got the reply from the Syndicate that the Syndicate as a body could not find its way to approve of the revised regulations. At the same time he was told that it was open to him to propose to the Senate for adoption the Draft Regulations of the Committee. It was how he moved the revised regulations in his individual capacity as a Fellow. Thus it was clear that the matter had been under consideration for the past three years and more.

In 1914 the financial problem in this connection had to be considered by the Syndicate. The attention of the Syndicate was also drawn to the complicated character of the existing regulations. The Syndicate had therefore to pay some attention to the different aspects of these regulations and felt that some revision might profitably be made and constituted a Committee. The chief object of the Committee so far as he was able to gather by his personal interviews with some of the members of the Syndicate and from the Registrar's letter appeared to have been the simplification of the existing scheme as far as possible and the removal of any real difficulties in the way of the various Sanskrit Colleges to meet the requirements of the Oriental Titles Regulations. A comparison

of the revised regulations with the old regulations would disclose that certain changes were effected in regard to certain important matters. The revised regulations were much simpler than the old regulations. Under the old regulations there were 106 question papers—37 for Siromani and 69 for Vidwan. Under the revised regulations there would be only 37 question papers—19 for Siromani, 15 for Vidwan and three common papers. The Committee took a lot of trouble to see that the simplification did not materially interfere with the efficiency of the examination or with the character of the course. Another important feature of the revised regulations was the position of the Dravidian languages. In the old regulations, for the Vidwan Title examination any two of the Dravidian languages, Sanskrit and Uriya formed one group; one of them could be chosen as the principal and the other two as subsidiary languages. In the revised regulations all those languages were retained in the Group, but candidates were allowed to take up Sanskrit as one of the two languages, and any one of the Dravidian languages or Uriya as the other language. The distinction between the principal and subsidiary languages was abolished. The same standard and the same proficiency should be attained in both the languages. That was another simplification. There were also other instances of simplification which he explained. Then again in the revised regulations provision was made for bifurcation of Oriental Titles Examinations, namely, the preliminary part and the final part, without interfering with the expenditure. Attention was drawn to the secondary position of Dravidian languages in the revised regulations. Thereupon the Committee carefully considered that matter and pointed out to the Syndicate in the final report that it would be a misconception to say that the importance of the Dravidian languages had been in any manner reduced or prejudicially affected in the revised regulations. In all the Colleges of the Presidency the combination was always Sanskrit and one Dravidian language. The combination of Canarese and Telugu had been an exception. Such a combination as Tamil and Telugu or as Tamil and Canarese was not noticed. Even in Tamil institutions the only

practical combination was Sanskrit and Tamil. His Telugu and Canarese friends had assured him that with regard to Telugu and Canarese the only combination really beneficial and practical was Sanskrit and Telugu or Sanskrit and Canarese. His Malayalam friends had told him that Malayalam might be most advantageously and conveniently combined with Sanskrit. Except in respect of Tamil there was no feeling against the combination of Dravidian languages with Sanskrit. Over-Dravidisation or over-Sanskritisation was equally to be condemned. The object of the Committee was to ensure a really high degree of proficiency in Dravidian languages.

The most important feature of those regulations was to help and promote Pandit erudition and without prejudice thereto to combine it to the needed extent and as far as practicable, with modern culture which would be acquired by acquaintance with modern subjects of study. The Committee believed that at the present stage it was not so very necessary to lay any very special stress upon the medium through which that acquaintance with modern subjects of study could be actually secured. While the Committee provided for a sufficient working knowledge of English before a candidate left his College or the University, the Committee also believed that anything like setting a practical standard of English knowledge at the initial stages would so far tend to embarrass the existing Sanskrit Colleges in the Presidency as to necessitate their closure in certain cases or their severance from the University in other cases. Keeping those things in mind the Committee provided in the revised regulations for a competent knowledge of English up to the Matriculation standard and at the same time took care to see that it did not operate as a bar to really willing and deserving people to take that course of study. Provision was made in the revised regulations for candidates to pass the English Division of the Matriculation Examination or some other examination equivalent thereto, before they appeared for the final examination. Provision was also made for sufficient acquaintance with modern subjects of study corresponding to special branches of learning, particularly to special branches included in

the Siromani course. The history of Sanskrit language and literature was included in the general part of the Siromani examination and made common to Siromani and Vidwan, the highest standard of the subject being insisted on for Siromani examination. Provision was also made for a critical and comparative study of the technical subjects in the special branches.

Mr. Hodgson:—The speaker has taken up 45 minutes. The usual time allowed for speakers is 20 minutes. The House has been patient for twice twenty minutes.

Mr. Kuppuswami Sastri solicited favour at the hands of the House as he stood on behalf of a number of charitable institutions, educational institutions eleemosynary in character. He requested the House to excuse him, to consider the regulations favourably and to vote in favour of the proposition.

Mr. A. Rangaswamy Aiyangar in seconding the proposition, said, that two aspects of the question should be remembered. The objects of the revised regulations was to simplify the test and to provide a standard of fitness for the titles. Any amendment moved to change the basis of the examination or alter the character of the titles conferred upon Oriental scholars would be entirely behind the purpose of the resolution. The matter had been pending disposal for the last three years. The draft had been sifted and it was now before the House in pursuance of the unanimous recommendation made by the Syndicate of which eminent people were members. It would be found from the report of the University that a number of institutions had applied for affiliation and those applications had been pending revision of the regulations for a number of years. There should be no delay in passing this resolution.

Mr. Natesan said that Mr. Hunter's amendments were out of order under Regulation 41.

Mr. Hunter said that it was no amendment.

The Vice-Chancellor:—It is a notice of motion under Regulation 22.

Mr. Allen:—I have got an amendment in my name (page 23 of the agenda). I think

this is the correct stage at which I should move it.

Mr. Kuppuswami Sastri:—I have not yet moved that proposition to which Mr. Allen's amendment relates.

This satisfied Mr. Allen.

Mr. G. Venkataranga Row rose to a point of order with reference to Mr. Hunter's independent motion and asked how Mr. Hunter could move an independent motion when there was already a motion before the House.

The Vice-Chancellor:—Mr. Hunter's motion is in order under Regulation 22, Clause 8.

Mr. Natesan said that Regulation 22 (Clause 8) was not applicable to propositions of that character, but referred to those where previous notice was not necessary.

The Vice-Chancellor:—The fact that Mr. Hunter has given notice does not make the motion out of order. As a matter of courtesy to the Senate he has given previous notice. That does not disentitle him to make the motion. The motion is in order.

Mr. Natesan:—I wish to point out that under Regulation 41 a motion before the Senate may be amended (1) by leaving out a word or words, (2) by leaving out a word or words in order to insert some other word or words, or (3) by adding or inserting a word or words.

Rev. Macphail:—It is hardly necessary to take up the time of the House. I can move it now.

The Vice-Chancellor:—The House is indebted to Mr. Hunter for having stated the full terms of the motion and for having given ample notice of the motion. There is no reason to complain of the procedure. The motion is one for the appointment of a Committee and nothing more. He could have moved it without notice. The mere fact that he has given a superfluous notice does not show it is out of order.

Mr. Natesan:—I submit to your ruling. I don't think that Regulation 22 is availed of this purpose.

Mr. K. V. Rangaswamy Aiyangar pointed out that a Committee could be appointed to inquire into and report on a matter, but could not be asked by the Senate to consider certain particulars and aspects. Riders could not be added on to the matter and alternatives could not be given. They were all familiar with the procedure for the appointment of a Committee. If Mr. Hunter omitted clauses 1 and 2 of his motion, he would probably be in order. He could ask for a Committee to inquire and report and it was for the Committee to decide what it should and should not do. Mr. Hunter could not dictate what it should do. It was not open to bring Mr. Hunter's motion under Regulation 22 (8). He (the speaker) asked for a ruling on the matter. If a ruling was given in favour of Mr. Hunter, in future it would be possible for them to transgress the regulation entirely and bring forward a motion similar to Mr. Hunter's proposition of any kind and riders under Regulation 22 (8).

Mr. Hunter:—There was no necessity for me to give notice of this motion at all. It is only fair to the Senate that they should have notice of a proposition of a somewhat far-reaching importance. If Mr. K. V. Rangaswamy Aiyangar's objection is valid, I am quite prepared to move only the first part.

Mr. Hodgson drew the attention of the House to Regulation 39 according to which the purpose of the Committee should be stated. That was precisely what Mr. Hunter had done.

The Vice-Chancellor:—Mr. Hunter's proposition is in order. In moving for the Committee I see no objection to his asking the House to give instructions to the Committee as to the lines on which it has to work. It is also open to any member of the Senate who wishes to move an amendment to Mr. Hunter's proposition to do so with regard to any instructions, to enlarge, or to restrict or modify these things.

Mr. Hunter then moved the following proposition:—

I. That the revised body of regulations for titles in Oriental learning be referred to a Committee of the Senate consisting of the

Rev. Canon Sell, Mr. Justice Abdur Rahim, Prof. Mark Collins, Mr. S. Kuppuswami Sastri, Rao Bahadur K. Ramanujachariar, Rao Sahib T. Ramakrishna Pillai, Rai Sahib G. Venkataranga Row and Mr. Mark Hunter for modification on the lines hereunder indicated, and for re-submission to the Senate at its next March meeting—

(1) by the omission of the Regulation numbered 22;

(2) by the inclusion of a provision requiring that every candidate shall, not later than two years before he appears for the final examination, have satisfied a test which shall guarantee his possessing sufficient knowledge of English to enable him to study English books bearing on the courses selected by him;

N. B.—(No provision should be made for 'exemptions' under this head).

(3) by the inclusion of a regulation or regulations providing that no candidate shall be declared to have passed the final examination unless he has satisfied the examiners in those parts of the examination which have relation to modern, linguistic, literary and critical scholarship;

N. B.—(The examination should be so arranged as to allow of these parts being valued separately.)

(4) by the inclusion of a provision making it a condition of approval (under the Regulation numbered 20) that on the staff of the institution seeking approval there be a person or persons qualified (a) to teach English, (b) to treat the modern side of the courses taken in a thoroughly competent manner;

(5) by the revision of the proposed regulations relating to the courses and examinations for the titles "Afzal-ul-ulama" and "Maulavi-i-Fazil" so as to bring them into line with the regulations relating to the courses and examinations for the titles "Siromani" and "Vidwan."

II. That in the event of the Committee, after consideration, deciding that a modification of the revised regulations relating to courses and examinations for Oriental titles on the lines indicated in I (1) to (4) is in

present circumstances impracticable the revised regulations be modified (1) by the deletion of all references to modern western scholarship, and subject of study belonging thereto, (2) by the abolition of the test in English.

In moving this proposition, Mr. Hunter said that this was not a technical matter and the issue was very clear and simple. A right decision on it was the concern of the University. When this question of the course for titles in Oriental learning was first started, he was a member of the Committee which drew up the proposal. The late Mr. V. Krishnaswamy Aiyar was a prominent member of that Committee and he the speaker was closely associated with him in those matters and at his request drafted a report recommending the institution of this course. He could not therefore be regarded as personally hostile to that course either then or at subsequent periods. One thing that was really sought was to make the course a University course so that the traditional methods of study and the traditional learning should be brought to some extent really acquainted with the principles and methods of modern linguistic and literary side. That was a "sine qua non" in the whole institution. Without that there was no institution of the kind, and the University could be of no assistance to the Pandits, and the Pandits could be no strength to the University. So some modern elements, linguistic and literary, were introduced into the courses of studies. In order that the students of those courses might be able to profit by the introduction of those studies a test in modern language was insisted upon from the very beginning. No one could become really acquainted with modern methods and principles unless he read books containing them. As a condition of entering upon those courses every student must pass a test in English. Matriculation Examination in English was taken as the test simply because it was thought a sufficiently high test, not because it was of any value in itself. What he (the speaker) now said was that unless the test of English knowledge was insisted upon sufficiently early, students would not read which they should read if they should be really acquainted with the modern side,

linguistic and literary. As soon as the course was started exemptions from that test were granted. Then the uselessness of passing the whole course except English was pointed out. In the revised regulations there was a provision regulation (15) requiring students to pass the Matriculation examination in English before they appeared for the final examination for Titles. But Regulation 22 stated:

"In the case of any candidate for the Oriental Title examination, the Syndicate may, notwithstanding anything contained in Regulation 15, dispense with his passing the English Division of the Matriculation Examination or any examination equivalent thereto, or postpone the passing of such examination for any length of time before the grant of diploma under Regulation 24. Applications for the concessions referred to in this regulation must be forwarded so as to reach the Registrar before the 1st October preceding the examination."

If the test in English was not essential in one case it was not essential in another case. So far as that fundamental condition was concerned the whole revised scheme was a snare and a delusion. If two years before a student appeared for the final examination he should be required to satisfy the test in English it would be a sufficient guarantee that he would read English books. The test was not high for people who had aptitudes for language study. If they had no such aptitudes and no brains, they were not fit for Oriental titles. The staff of colleges training students for such titles should contain men competent to teach English and the modern side, linguistic and literary, in a proper fashion. Without adequate guidance and instruction in such things, students would not be able to profit by the courses prescribed.

Mr. R. Swaminatha Aiyar asked if there were any such people available here.

Mr. Hunter replied that there were such people. Of course he realised there were difficulties in the way and he was not able to make any promise of that sort. There would not be the less difficulty a few years hence. If they did not come to some decision now, it was not likely they would come to a decision

later on. If it could be done, they should have a reality. Unless they could pay competent salaries to such persons, they could not get them. If they believed it, money would be put out. If they did not believe it, money would not be put out. Pretence was not tolerable. If they kept on those titles without those provisions, the irreducible minima, without those safeguards of the interests they would simply institute a very oblivious institution.

Mr. Hodgson, in seconding the motion of Mr. Hunter, said that unless the measures proposed by Mr. Hunter could be discussed by the Committee and carried out, the whole idea of teaching those subjects on modern lines should be dropped altogether.

Mr. K. B. Ramanathan, in opposing Mr. Hunter's motion, said that students of Sanskrit might possess sufficient knowledge of English to grasp the main things in English books on Comparative Philology and so on, but might not be able to get through English examination of the Matriculation standard. If the passing of the test in English was insisted that would take them away from Oriental studies and they might prefer to take up the low position of a schoolmaster in one of the ordinary schools and equip themselves to Oriental side in those schools. There was no danger if the time for equipping in English was postponed.

Mr. Natesan, in opposing the motion of Mr. Hunter, said that students for titles in Oriental learning should possess a certain amount of knowledge in English, but they should not be compelled to pass a rigorous test. There were a large number of Pandits and Moulvies proficient in various branches of Oriental learning. The University should also recognise their learning. It was with that object the regulations were framed. Nobody would be foolish enough to neglect English; for if the diploma was not given their learning and scholarship would not be of much use.

Mr. C. P. Ramaswamy Aiyar said that the object of this examination was to keep alive as far as possible the old Pandit type of culture. The University attempted to supple-

ment the education of the Pandits with critical analysis for which Western research had stood. High attainments in English was not possibly consistent with the Pandit training, if it was to be carried on successfully on the old lines. Not to insist upon a knowledge of English at all would not be consistent with the original objects. But it should not be open to an Indian University to refuse to grant Indian titles in Indian branches of learning unless and until a person trying to get that title had also equipped himself up to a high standard in the critical literature of the special subject chosen by him in English also.

Mr. Hunter:—I say nothing of the high standard.

Vice-Chancellor:—You wanted a separate minimum.

Mr. Ramaswamy Aiyar, continuing, said that cases could be easily thought of when all the results of Western scholarship and culture could be brought to the Pandit and Moulvi without a very high development of the knowledge of English language. He would have no objection to have those words cut out so as to make it possible to acquire that amount of proficiency in English before students actually got diplomas. Any attempt to overhaul the machinery of the Oriental Titles examinations ought to be objected to.

Khan Bahadur Aziz-ud-din Sahib did not agree with Mr. Hunter that an examination in English should be prescribed as a necessary test, as it would work very hard upon Mussalmans who were backward in English education and wordly prosperity also.

If English were to be made compulsory for students appearing for Oriental Titles examinations, nobody would care to appear for those examinations. There was no market. If a Mahomedan, instead of acquainting himself with Arabic and English for the purpose of the Oriental Titles examination should attempt to read English more he would get his livelihood. In the unofficial colleges there was hardly any Hindustani, Persian or Arabic Pandit and Mussalman boys had to take up Tamil, Telugu, Malayalam or Canarese. There was no demand for Pandits in

Hindustani, Persian or Arabic language and no encouragement was given to such Pandits. What would be their market value if the Mussalmans obtained those Oriental titles. At the initial stages English should not be insisted on. If English was insisted on, studies for examinations for titles in Oriental learning would be strangled.

Professor S. Krishnaswamy Aiyangar entirely sympathised with the need for cultivation of a modern language like English for the Pandit. The rising generation of the Pandit class did possess a certain amount of knowledge of English enough to work their way up. But 95 per cent. of them would fail the moment they were asked to submit to an examination. It would be exceedingly desirable not to insist upon an examination of a stiff kind.

Mr. Justice Abdur Rahim, in opposing the proposal for an examination, said, that he had been in the Board of Studies. They first agreed with the Sanskrit Board that a certain knowledge of English might be insisted on. That was passed. After two or three years no candidate was forthcoming for those titles. The Board of Studies for Arabic, Persian, etc., came to the conclusion that English should not be insisted on as a necessary condition. On a reference made to that Board of Studies by the Syndicate they reported that no candidate at any rate from the Madras Presidency would be willing to undergo the examinations. The Madrasas were very conservative institutions and resented any sort of interference with their curricula and any attempt to impose English on them. Students of those Madrasas would not be able to qualify for those Oriental titles. In an Indian University Oriental learning should be encouraged. To recognize Oriental Scholars in Sanskrit, Arabic and Persian, a certain knowledge of English might be of some use in ascertaining what was being done in Europe. With that object English was introduced. So far as Arabic and Persian were concerned, the introduction of English meant the prohibition of candidates from appearing for the Titles examinations. The question was whether they were going to recognise Oriental scholarship without the

modern side. So far as Persian was concerned there was a great deal of work yet to be done in England before a Persian scholar could usefully turn his attention to English works on Persian language. There were men in India trained in Europe and Egypt. The work done in English in India would not be of very much value to Oriental scholars in Arabic and Persian. Even for them the knowledge of a modern language would be of great help. They ought not to be in a hurry to impose English as a necessary test. They must bring the Madrasas under the influence of the University. They had instituted a syllabus. If a candidate came up to the syllabus it would ensure a critical study of Oriental literature and science, a critical study in Mahomedan theology, jurisprudence and Arabic literature. Knowledge of English would be of no use. A great deal of modern critical work was being done every day in India to popularise the sciences in Urdu by Shibli (one of the followers of Syed Ahmed) and others. Similarly in Arabic and Persian they would find works exactly the same as the modern method. The dictionary in Arabic was as critical as they could find in any of the modern languages. If the Madrasa was brought under the influence of the University things would move very fast. The Board of Studies for Arabic and Persian care fully thought over the matter and came to that conclusion.

Mr. F. S. Davies said he would support the revised regulations if Regulation 22 was omitted. He knew that Pandits who took Malayalam and Sanskrit for the Titles examinations and who were allowed to take English at any stage learnt English up to the Matriculation standard and passed the English. He thought that the provision of English would not act seriously against the encouragement of Arabic and Persian. Pandits felt that a knowledge of English gave them a status and a higher pay. If regulation was allowed to remain as part of the regulations he would not vote for them.

Mr. Kuppuswami Sastri opposed the motion for a Committee.

Mr. Hydari said that if Pandits and Moulvies were to be brought up according to

their particular systems, the University should not burden the Oriental Titles examinations with any knowledge of English or any modern language. Mr. Mark Hunter's proposition was to require a knowledge of English from the candidates for Oriental Titles examinations and if that was found impossible by the Committee, English could be altogether eliminated.

Rao Bahadur K. Ramanujachariar pointed out that Mr. Hunter's motion regarding the test of a candidate's knowledge in English was very vague. If Matriculation or some other test was prescribed, candidates would know what amount of knowledge was expected of them before they offered themselves for Siromani or Vidwan examinations. If the same vague suggestions were made with regard to the Intermediate or B.A. examinations where would the affairs of the University stand? If the standard was not fixed, it might change from year to year. It was said that for the understanding of books written in English on Oriental subjects such as Mimamsa and Nyaya, a high standard of the knowledge of English was necessary. Were there many books written on those subjects? Books were written in Sanskrit by Pandits with the help of Graduates and Masters of Arts in Sanskrit. Pandits translated in Sanskrit what they had to teach in Sanskrit. That was a much better method than studying a subject in English. What was wanted was that Pandits should know critical methods of comparative study and spread better knowledge among the people by writing books in Sanskrit, Telugu, etc., on Western critical study. It would be sufficient if candidates were required to pass Matriculation or some other test in English before they were permitted to appear for the final examination. For the study of vernaculars, apart from the study of Sanskrit, linguistic scholarship according to modern methods was absolutely necessary. If the study of Dravidian languages was to improve it could be improved by people who had made a study of Philology under Mr. Hunter or under other gentlemen teaching that subject.

Dr. Slater moved that the motion be put to vote.

Vice-Chancellor:—There is no provision for your motion.

Dr. Slater:—I understand it is not in order.

Mr. R. Swaminatha Aiyar said that Mr. Hunter was an impatient idealist.

The Hon'ble Mr. Stone said that Mr. Hunter had not said that the Committee should adopt the instructions and had not proposed them as good things or bad things.

Mr. Hunter:—I would prefer to withdraw the whole thing beginning from the words "for modifications on the lines hereunder indicated for re-submission to the Senate at its next March meeting, etc.," so that the proposition would be that the revised regulations be considered by the Committee consisting of so and so.

The Vice-Chancellor said that Mr. Hunter's proposition involved the consideration of all the principles referred to by the previous speakers.

Mr. K. V. Rangaswamy Aiyangar asked if Mr. Hunter was entitled to withdraw a portion of his proposition. He could withdraw the whole proposition with the permission of the House, but not a portion of it. He requested the Vice-Chancellor to formally settle the matter.

Rev. Macphail moved as an amendment the first part of Mr. Hunter's proposition, namely,

1. "That the revised body of regulations for Titles in Oriental learning be referred to a Committee of the Senate consisting of the Rev. Canon Sell, Mr. Justice Abdur Rahim, Prof. Mark Collins, Mr. S. Kuppuswami Sastri, Rao Bahadur K. Ramanujachariar, Rao Sahib T. Ramakrishna Pillai, Rao Sahib G. Venkataranga Rau and Mr. Mark Hunter."

Dr. Simonsen seconded the amendment.

Mr. Natesan objected strongly to the matter being referred to a Committee. Two Boards of Studies quite competent to express an opinion on the subject had given their opinion and the whole thing had taken a shape in the form of regulations. The subject should be voted upon without any delay.

Mr. Justice Abdur Rahim:—This matter ought to be reconsidered in view of what I have already said.

Mr. Justice Coutts-Trotter, in supporting the motion for a Committee said that there were two absolutely conflicting ideals. Mr. Justice Abdur Rahim had said that an Indian University must recognise Oriental learning as such and that if the University found a distinguished scholar in Urdu, Arabic and Persian, he should be given the title, even though he might not possess even a smattering knowledge of English. That was a perfectly intelligible position and he would subscribe to it. Mr. Ramaswamy Aiyar's position was totally different and he wanted to introduce a certain amount of knowledge in a European language and through it the modern culture. That was also a very excellent idea, but totally different from the idea of Mr. Justice Abdur Rahim. If the ideal of Mr. Justice Abdur Rahim should be put into practice there should be no pretension by the description given in the syllabus, that those men had had a training in modern Western scholarship. It would be a sham to do that and nobody wanted a sham. Therefore they should decide which of the two things they wanted. He did not see why they should not have both in time.

Rev. Father Bertram supported the previous speaker.

Mr. S. Krishnaswami Aiyangar said that there was really no confusion in the matter. They had for the critical side the Honours B. A. course. The question at present was whether the Western critical scholarship should be insisted upon at the outset as the irreducible minimum or should be gradually developed to bring the Pandit into line with Western scholarship.

The Hon'ble Mr. Stone, in speaking for the Committee, said that the revised regulations did not settle the question of the English test, but left it open to the Syndicate to dispense with the passing of the Matriculation examination or any other equivalent examination. The regulations gave the Syndicate indication of the grounds on which they had to exercise that power. The Syndicate had exempted certain candidates from the English test and not others. He would vote for the Committee, not because the Committee would make English compulsory but for the

contrary reason. He entirely agreed with Mr. Justice Coutts-Trotter. A very great deal could be said to make those titles purely and entirely oriental. His one feeling had always been about it. He had always regarded that the ideals of the Titles examinations should be that they should not speak of them as an integral part of the University work. They should think of them as extension lectures. School examinations were rather out of the regular lines of University work. Unless the Colleges had a complete machinery for encouraging the study of Oriental languages in critical modern side there was no use of including particular subjects into the Oriental Title examinations. He supported the motion for a Committee in the hope that the Committee would decide to have those examinations purely and solely Oriental. He would suggest that the name of Mr. Justice Coutts-Trotter be added to the list of members of the Committee.

Mr. Allen asked if Mr. Kuppuswami Sastri was prepared to omit Regulation 22 which introduced an element of uncertainty. The Syndicate might at one time insist on English and at another time not insist on it.

Mr. Kuppuswami Sastri replied that personally he was not in favour of dropping 22, but in deference to the wishes of the house he would do so.

Mr. Hunter said if revised Regulation 22 was dropped they would not satisfy the conditions explained by Mr. Justice Abdur Rahim.

Mr. Kuppuswami Sastri explained that the original revised regulations were intended to be applied to Sanskrit and Dravidian languages. At the final stage his attention was drawn to the fact that Arabic and Persian Boards of Studies were not prepared to drop the regulations, as they were understood to be, but his attention was drawn to the uncomfortableness of the regulations. So he re-drafted the revised regulations and incorporated the existing regulations with reference to Arabic and Persian except in one small matter relating to English. Even now if the revised regulations were passed Mr. Justice Abdur Rahim and his colleagues

THE EDUCATION BILL. (ENGLAND & WALES.)

In the House of Commons on August 10, Mr. Herbert Fisher (Sheffield, Hallam), who was received with cheers, said:—I rise to ask leave to introduce a measure for the promotion of education in England and Wales. When a measure of far-reaching social importance is introduced by a Coalition Government in the height of a great European war, and at a late stage of a busy and anxious Session, I feel that the House is entitled to assurances upon three points. It is entitled to be assured, first, that adequate provision should be given for the discussion of the measure, then that the Bill should be urgently demanded by and connected with the circumstances of the war, and, lastly, that at a time when the preservation of national unity is a grave and dominant consideration, there should be nothing in the Government proposals calculated to revive ancient party reorientations and controversies.

Commander Wedgwood (Newcastle-under-Lyme, L.)—There will be.

Mr. Fisher.—It is because the Government feel that in this sphere of administrative action, so decided and fundamental in its consequences, there should be no suspicion on the part of hon. members that we are anxious to force the pace, or to preclude a full and dispassionate criticism of our proposals, that I am standing at this box this afternoon. We are aware that under the pressure of Parliamentary business it may not be possible for us to proceed very far with this measure during the current Session, but we are nevertheless desirous of taking this opportunity, while the Summer Recess is still in the future, of presenting our Bill for the consideration of the House and of the country. As to the second point, I admit that this Bill will not enable us to beat the Germans in 1918. Indeed, if it were passed before Christmas, many years must elapse before its provisions could bear their full fruit. But the measure is not obscurely connected with the circumstances of the war. It is prompted by deficiencies which have been revealed by the war, it is framed to repair the wastage which has been caused by the war, and, should it pass into law before peace is struck, it will put

would find it an easy matter to place before the Senate certain suggestions for introducing special modifications or concessions with reference to Arabic and Persian. He hoped that that would commend itself to Mr. Justice Abdur Rahim. He appealed to the House to pass the revised regulations with the exception of Regulation 22.

Mr. Hunter said that Mr. Kuppuswami Sastri could not drop Regulation 22 if any member of the Senate objected to its being dropped and he objected to it.

Mr. Govindaraghava Aiyar said that the object of the revised regulations was not to stiffen the conditions under which the titles should be given, but to see that the difficulties in the way of candidates appearing for the examinations were removed. The passing of a particular examination was not a "sine qua non" to follow the Western methods of thought. Pandits were quite capable of understanding the Western method of thought although their acquaintance with a Western language might be imperfect. It was unnecessary to refer the matter to a Committee.

Mr. K. B. Ramanathan said that it was impossible for an Oriental scholar to get through the course for the Titles examination without an acquaintance with English language as the syllabus clearly indicated. Mr. Hunter must be satisfied with that acquaintance of the Pandit with the English language.

Mr. K. V. Rangaswami Aiyangar suggested the addition of Messrs. K. B. Ramanathan, Aziz-ud-din and C. P. Ramaswamy Aiyar to the Committee.

The motion to refer the revised regulations to the Committee was carried by 26 votes against 13.

On the motion of Mr. Stone, seconded by Mr. Hanumantha Row, the consideration of the rest of the items on the agenda was deferred to 4-30 P.M. on the day before the Convocation.—*The Hindu*.

a prompt end to an evil which has grown to alarming proportions during the past three years—I allude to the industrial pressure upon the chief life of this country—and it will greatly facilitate the solution of many problems of juvenile employment which will certainly be affected by the transition of the country from a basis of war to a basis of peace.

EDUCATIONAL CONTROVERSIES.

I now pass to the third point. Is the measure controversial? I am a very raw Parliamentary hand, but I have noticed that there are hon. members in this House who are not inexperienced in discovering matters of controversy even in places where, to the eye of innocence, the fate of empires is not conspicuously involved. I will not therefore prophesy, but I do venture to hope that any controversies that may be excited with respect to the proposals which I am now about to lay before the House will not centre round the old question which in times past has excited so much warm debate in this House and in the country at large. I do not wish at this stage to raise what is known as the denominational question in any shape or form. I am not proposing to supersede or to revolutionize the educational settlement of 1902. That settlement was not perhaps exactly what my right hon. friend would have made it if he had a free hand, and many of us, from one point of view or another, would have wished it other than it is. I am aware that grievances under that settlement are still felt, that some of its principles are sharply contested in many quarters, and that attempts to adjust conflicting views have so far been unhappily frustrated. But I think I am representing the general feeling of this House and of the country when I say that at this particular moment it is specially to be desired that the members of the old religious controversy should not be fanned into flame, and that the question of education should be considered in the light of educational needs and those alone. At the same time, I would not desire the impression to go abroad that the Government ignore the spiritual aspects of education, or are indifferent to the strongly-held views of those who, from one point of view or another, find fault with this or that feature of our existing system. I am not afraid of the denominational question. I hope and believe

that, in the generally improved atmosphere which has been created by the war, parties may be brought closer together, and that a settlement of the outstanding issues may be reached. But, quite apart from these issues, many of which may be solved without resort to legislation, there is a great and urgent need for development in our educational system. I believe that this development will be more usefully and fruitfully considered if we can resolve to defer for future and separate discussion what is known as the denominational issue.

NO RADICAL ALTERATION IN MACHINERY.

The Bill, then, which I invite the House to consider, assumes the administrative structure which was erected by the Act of 1902. It assumes that the business of carrying on the educational work of this country will continue to be entrusted to the authorities on whom it was devolved by that Act. We do not even propose, except with special Parliamentary sanction, to merge the non-county boroughs and urban districts into the counties. We feel that these small authorities have in many cases done their work well, and that their continued existence is not incompatible with the formation of general and progressive schemes of education in the country as a whole. Nor do we propose to enlarge the powers of the boroughs and urban districts in the sense of making those authorities responsible for the provision of higher education. I am quite alive to the inconvenience, and even embarrassment, which has arisen, and still arises, in some places, and at some times, owing to the distinction between Part I and Part II of the Act of 1902, and I hope that some of the provisions of the Bill will operate to mitigate, if not entirely to remove, that inconvenience. Everybody, however, knows that the reconstitution of public authorities and the consequent alteration in type of areas is a difficult and controversial business, and unless it is essential for the proper development of education, I do not think that that work should be undertaken.

In general we adhere to the administrative groundwork of 1902, because experience has shown that it has enabled a large educational advance to be accomplished, and that it has been the means of enlisting a not inconsiderable army of persons who take an interest in education and who have by this

time, acquired a good deal of valuable experience in the management of schools. The Bill which I am proposing to the House does not involve any radical alteration in machinery, though I should be greatly disappointed if it does not considerably modify the method of using that machinery and greatly increase its efficiency. Its object is to provide, under the better operation of the existing machinery—amending it, it may be, in some directions, and extending it in others—enlarged and enriched opportunities of education to the children of the poor. Let me add that, although the measure touches public education at many points, it does not profess to cover the whole field of educational reform. For instance, it does not affect the government of the Universities, or of those institutions of secondary, technical, and other higher forms of education, which are not maintained or aided by local educational authorities. I am not proposing here to deal with the scholarship system, the Training Colleges, or Libraries, and the establishment of a satisfactory pension scheme for teachers in secondary, technical, and other schools at present outside the State scheme of pensions must be left to a separate measure.

CHILDREN AND THE WAR.

There is another educational problem of great urgency, which, after much anxious consideration, I have decided to exclude from the operation of the Bill. I have already made a passing allusion to it. In three years of war some 600,000 children have been withdrawn prematurely from schools and immersed in industry. They are working on munitions, in the field, and in the mines. In a thousand different ways these children are contributing to our success in the war. Though they are earning in some cases high wages, these children are incurring a real sacrifice, the effects of which, in many cases, will be felt to the end of their lives. I ask the House to consider whether the nation has not incurred a special responsibility towards the children who have been brought into help in war, often in circumstances most adverse to the formation of stable character. There can be only one answer—that some special means must be found either by administrative action, or otherwise, whereby this responsibility may be adequately discharged.

Before I proceed to the particulars of the Bill, I would like very briefly to describe some aspects of the movement of opinion which, in the minds of the Government, have made a considerable measure of advance in education an absolute necessity. In the first place, attention has been increasingly directed to the close connection between educational and physical efficiency. One of the great events in our social history is the establishment of the school medical service in 1907. We now know what we should not otherwise have known, how greatly the value of our educational system is impaired by the low physical conditions of a vast number of the children and how imperative is the necessity of raising the general standard of physical health among the children of the poor if a great part of the money spent on our educational system is not to be wasted.

LACK OF SCIENTIFIC CORRELATION.

That is one element in the movement of things. Another element is the growing consciousness that there is a lack of scientific correlation between different parts of our educational machine. We find an important and populous centre without a secondary school in any shape or form. We find another and less important centre with four secondary schools. We discover that even where there is an adequate provision of secondary schools in the area there may be no provision of boarding scholarships which may enable the abler children in the villages to take advantage of the schools in their neighbourhood, no provision for the advanced teaching of the older pupils, and no provision for scholarships for the Universities. Every one realizes the elementary fact that some children if they are only given an opportunity will profit most through modern languages and literature, others by a scientific and technical education, and others again are destined by their natural turn of mind to profit most from an education based largely on the study of classics and history. But under our existing system we have no security that in any area of accessibility—to adopt a somewhat vague but convenient term—these various needs and aptitudes will be provided for. There is not even a reasonable probability that the child will get the higher education best adapted to his or her needs. The Act of 1902 no doubt contemplated area schemes

for higher education, but the duty of considering the needs of an area was left hanging in the air.

The third feature in the movement of things is the increased feeling of social solidarity which has been created by the war. When you get conscription, when you get a state of affairs under which the poor are asked to pour out their blood and to be mulcted in the high cost of living for larger international policy, then every just mind begins to realize that the boundaries of citizenship are not determined by wealth, and that the same logic which leads us to desire an extension of the franchise points also to an extension of education. There is a growing sense, not only in England, but through Europe, and, I may say especially in France, that the industrial workers of the country are entitled to be considered primarily as citizens and as fit subjects for any form of education by which they are capable of profiting. I notice also that a new way of thinking about education has sprung up among many of the more neglected members of our industrial army. They do not want education in order that they may become better technical workmen and earn higher wages; they do not want it in order that they may rise out of their own class. They want it because they know that in the treasures of the mind they can find an aid to good citizenship, a source of pure enjoyment, and a refuge from the necessary hardships of a life spent in the midst of the clanging machinery of our hideous cities of toil. I ask whether there is a single struggling young student in this country to whom a library of good books has not made an elemental democratic appeal?

"Unlike the hard, the selfish and the proud,
They fly not sullen from the suppliant crowd,
Nor tell to various people various things,
But show to subjects as they show to kings."

The General Framework.

GOVERNMENT'S SIX PROPOSALS.

I will now descend to our specific proposals, which may be conveniently though not exhaustively considered under six heads. First, we desire to improve the administrative organization of education. Secondly, we are anxious to secure for every boy and girl in this country an elementary school-life, up to the age of 14 years, which should be unimpeded by the competing claims of industry. Thirdly, we desire to establish part-time, day continuation schools which every young person in the

country shall be compelled to attend unless he or she is undergoing some suitable form of alternative instruction. Fourthly, we make a series of proposals for the development of the higher forms of elementary education and for the improvement of the physical condition of the children and young persons under instruction. Fifthly, we desire to consolidate the elementary school grants; and sixthly, we wish to make an effective survey of the whole educational provision of the country and to bring private educational institutions into closer and more convenient relation to the national system.

I will first, then, deal with our proposals as affecting the general framework of education. We impose a duty upon the councils of every county and county borough to provide for the progressive development and comprehensive organization of education in their respective areas and to submit schemes to the Board, and in order that this function may adequately be discharged we propose to remove the two penny limit of the amount to be raised for higher forms of education which was imposed by the Act of 1902. The council of a county or county borough will, in other words, plan out an educational policy. Before submitting its scheme to the Board, the council will be required to consult the authorities having power in the county under Part 3 of the Act of 1902 with reference to the mode in which and the extent to which any such authority will co-operate with the county, and the Board will be informed as to the co-operation to be expected from any such authority. There will, we trust, be little difficulty in securing the degree of co-operation between the authorities within the county areas which may direct it for the presentation of a combined and intelligent plan of educational organization from bottom to top. This, then, is the first point we desire to secure. We impose a duty on each authority to submit an area scheme, not for elementary education only, but for all forms of education. We impose a duty on the county authorities to consult the Part 3 authority in their area. We impose a duty on the Part 3 authority to co-operate with the Part 2 authority, that is to say, the authority for higher education, to submit a scheme for the performance of its own duties and for co-operation with the Part 2 authority. Finally, we liberate the county authority from the limitation of the two-penny rate.

But there are some educational problems which can most conveniently be considered in relation

to an area larger than a county or county borough, and by bodies representing a wider constituency. The supply of elementary teachers, for instance, could be best dealt with in relation to the large areas. So, probably, could a scheme for scholarships to be held at the secondary schools or the Universities. Or, again, the provision and utilization of secondary schools might be more scientifically planned out and with less fear of overlapping in the large-area than in the small area. It is, of course, possible under the existing law for authorities to combine together for any one or all of such purposes.

PROVINCIAL ASSOCIATIONS.

It seems to me desirable that distinct statutory authority should be given for the formation of bodies which we may call provincial associations. Assuming that for some purposes it may be convenient to have larger areas than the county borough, one of two ways might be taken to effect this object. The county might be mapped out into eight or nine provincial areas, each provided with a council, representing the local education authority of the area together with representatives of the University and other interests, and wide powers, including the power to levy a rate, might be assigned to each of these councils. That, I understand, is the scheme advocated by Lord Haldane, who, of course, speaks on all educational questions with great authority. Or the Board might be empowered by statute to provide for the establishment of provincial associations after consultation with the authorities concerned, the local education authorities being empowered to delegate administrative and educational functions to these associations, and conversely the associations being empowered to exercise any functions so delegated. The Bill follows the second of these paths. We think it would be premature to carve up England into provincial areas or to embark at once on such a very large scheme of devolution as the advocates of the former plan contemplate. We certainly cannot assume that the local education authorities would be willing to come into the plan, and we think it wiser to look for our larger authority to a gradual process of coalescence fostered by the State, probably in the first instance with a view to some specific purpose

or group of purposes, to which other purposes might in time be added.

We have, then, county and county borough authorities obliged to submit comprehensive schemes of education for their respective areas, and these might be gradually supplemented by provincial associations for those educational purposes which are most conveniently dealt with in relation to areas larger than those of the county borough. What do we mean by comprehensive schemes? First, we want to make it plain that the education given in our public elementary schools is not to be considered an end in itself, but as a stage in the child's education destined to lead to other stages. Secondly, we propose to require of local education authorities, under Part 3 of the Local Education Act of 1902, to make adequate provision either by special classes or by means of central schools, for what may be termed higher elementary education. We desire to meet the objection which is commonly, and not without justice, advanced against so much of the work done in our public elementary schools during the last two years, that the children are marking time, that their education is not bringing them on, and that it does not fit them for their future calling. We desire to change all that, and our Bill provides not only for the introduction of practical instruction at appropriate stages, but for the preparation of children for further education in schools other than elementary, and for transference at suitable ages to such schools.

NURSERY SCHOOLS.

I pass now to a series of proposals which are designed to improve and to strengthen our existing fabric of elementary education so as to secure to every child in the kingdom a sound physique and a solid groundwork of knowledge before the period when the part-time system begins. We propose to encourage the establishment of nursery schools for children under five years, and we empower the local education authorities to raise the age at which normal instruction in the elementary schools begins to six, as soon as there is an adequate supply of nursery schools for the younger children in the area. We propose to amend the law of school attendance so as to abolish all exemptions between the ages of 5 and 14, and we propose to place further restriction

that we already have this power in the case of a large number of schools falling within the statute. Public schools and many private schools, which obviously reach, or nearly approach, the standard of the Board for secondary schools have been able for the last 10 years to obtain free inspection, and the names of several well-known schools of both classes are to be found on our published list. But a very large number of schools at present do not fulfil this condition, and it is clearly in the interest of the parents and of the community that those schools should have the benefit of such experience and guidance as the Board can put at their disposal. Many of them would be glad of advice and encouragement but they are just the schools which find it impossible to ask for an inspection to be made.

Sir J. D. Rees (Nottingham, U).—Does the right hon. gentleman mean a public school like Winchester? Is it in that sense he is speaking?

Mr. Fisher.—My reference is rather wider. Winchester will certainly come under the description of public schools, but I am using the words "public schools" now in the wide sense of the secondary school not maintained by the Board.

EDUCATIONAL INFORMATION.

The second point relates to educational information. There is probably no civilized country in Europe in which the Government know so little of what is going on in the field of education as England. The Board has no official knowledge at all of a very large number of schools and educational institutions of an important kind, and very scanty and precarious knowledge of those that are outside the system of grants. I fear that not a few private venture schools are frauds on the public. The teaching is deplorable; the buildings are inappropriate; there is no adequate security for the health and progress of the pupils. The Government do not wish to put down private schools. We recognize that many of them are excellent, and that there is great value in permitting educational experiments of all kinds to be made, even at the cost of some disregard of the normal standard of efficiency. But in view of the large sums of public money invested in education we think that the Board should be in a position to inform itself and Parliament more exactly than it can now do as to the quantity and quality of

the total provision of education in the country. Accordingly the Bill provides that, where the necessary information is not otherwise available, the Board may call upon every school or educational institution to furnish particulars.

A BLOCK GRANT.

Thirdly, we provide in the Bill for the consolidation of all grants made for elementary education. It has long been recognized that a block area grant made to the local education authorities in respect of its general educational system is more satisfactory than a number of different grants allocated on the basis of particular schools and particular subjects of activity. The introduction of the block grant system will, I hope, conduce to further simplification and the saving of clerical and administrative labour both in Whitehall and in the provinces, though I think only fair to add that it will undoubtedly involve a heavier burden or responsibility, a more delicate and more enlightened exercise of discretion both in the centre and at the periphery. It is quite obvious that, if you have a general block grant system allocated not for specific purposes, you necessarily imply that there will be considerable intelligence both at the centre and at the circumference. The change is to be recommended not only on the ground of economy. I believe that the moral effect of the proposal which I am pressing upon the House will be all to the good. We want local education authorities to look at the State system of grants broadly, and we desire our own attitude to be equally liberal. We do not want the local education authorities to view every topic from the grant-earning aspect only, to consider whether by doing one thing or another by developing one subject or another, they may earn a little more or a little less of State grant. We do not wish to be writing letters to the local education authorities arguing that we are paying them 6s. 8d. too much or, it may be, 6s. 8d. too little. On the other hand, if the Minister for Education is to be really responsible to Parliament for the expenditure of the large sums which are voted by Parliament, if Parliament is to have any security that it gets good value for its money, it is of course essential that the central authority should maintain indissoluble and effective powers of administering the grants so

as to give effect to the national policy and equally to protect the nation's interests. Some of the local authorities are better and more to be trusted than others. Subject to this reservation, and broadly speaking, the more freedom and responsibility we can give the local authorities the better I shall be pleased.

EDUCATION OF THE WHOLE MAN.

These are some of the general features of the measure which I have the honour, on behalf of the Government, of submitting to the House. We assume that education is one of the good things of life, which should be more widely shared than has hitherto been the case amongst the children and young persons of the country. We assume that education should be the education of the whole man, spiritually, intellectually, and physically; and it is not beyond the resources of civilization to devise a scheme of education, possessing certain common qualities, but admitting at the same time large variation, from which the whole population of the country, male and female, may derive benefit. We assume that the principles upon which well-to-do parents proceed in the education of their families are valid "mutatis mutandis" for the families of the poor, and that the State has need to secure for its juvenile population conditions under which mind, body, and character may be harmoniously developed. We feel also that, in existing circumstances, the life of the rising generation can only be protected against the injurious effects of industrial pressure by a further measure of State compulsion. But we argue that the compulsion proposed in this Bill will be no sterilizing restriction of wholesome liberty, but the essential condition of a large and more enlightened freedom. It will tend to stimulate the civic spirit, promote general culture and technical knowledge, and diffuse a steadier judgment and a better-informed opinion through the whole body of the community.

The Bill Welcomed.

In the debate which followed Commander Wedgwood (Newcastle-under-Lyme, L.) said that, however doubtful he was about some of the proposals of the Bill, he was sure that every member present was glad to have heard an Education Bill presented by a President who was an educational specialist under-

taking work, which he liked. He criticized the proposals for raising school age, which he believed would not be approved by the people who had to obey the law. He declared that the spirit we were developing was the spirit of the anarchist, and said that this sort of grand-motherly legislation could not in the long run benefit England. Mr. Acland (Cornwall, Camborne, L.) expressed the view that the Bill marked the greatest advance in education that had been made since 1870, and congratulated Mr. Fisher on having had the courage and the vision to bring forward his proposals. The Bill was as truly a war measure as anything which had been necessary for the development of our fighting forces, and he hoped it would pass in time for the period of reconstruction. It was as true now as when Milton wrote it 270 years ago that "the reforming of education is one of the greatest and noblest designs that can be thought on, for the want whereof the nation perishes." Sir J. H. Roberts (Denbighshire, W. L.) welcomed the proposals, and assured the House that no part of the Kingdom took more interest in them, or would strive to obtain more advantage from them, than Wales. At this time the Bill was as an oasis in the desert of war. In its provisions lay the possibility and the power of healing the wounds of war and equipping the rising generation to meet the momentous future. Sir J. Yaxal (Nottingham, W. L.) said his experience when addressing meetings of parents, representatives of labour and members of town and county councils in various parts of the country had been that without exception they were prepared to consider favourably ideas of the kind which had been put forward by the President. For the general plan which had been explained he wanted to express goodwill and his wishes for its success. He was delighted to have at last heard a great Education Bill expounded in a true educational spirit, with a purpose, a motive, and he thought, a method which deserved to succeed. Sir J. D. Rees (Nottingham, E. U.) regarded it as a strange development of democracy that such a measure as this should be proposed at the end of the existing Parliament without the people in the constituencies being consulted. Sir W. Pearce (Limehouse, L.) thought the day continuation school was an enormous

improvement. He urged that the Government contributions to local authorities should be at least 50 per cent. of the total expenditure on elementary and secondary education. Mr. John (Denbighshire, E. L.) wished the President of the Board of Education would try to clear himself of an adverse environment and bring forward proposals of a much bolder character.

Mr. King (Somerset, N. L.) said he was disappointed that the Minister of Education did not propose to push on at once with his proposals. It was not often that the "Times" afforded him spiritual solace, but he was greatly impressed by a remarkable article on education which appeared in that newspaper some time ago, under the heading 'A National College of All Souls.' ["The Times Educational Supplement," Feb. 22, 1917.] It said that the true war memorial to our dead heroes was the placing of the future education of our young men on a better and permanent basis. The article was signed, "An Officer Wounded at the Somme," which showed it was written by no mere pundit of the Board of Education. If members wanted to show their sincerity in regard to education they must be prepared to be serious about this Bill. Mr. D. M. Mason (Coventry, Ind.) thought that in industrial centres employers were looking to the Government to pay greater attention to technical education in the future. It would be a false economy in any way to stint the expenditure of public money on education.

The Bill was then brought in and read a first time.—*The Hindu.*

Just Ready.

Mr. JUSTICE ABDUR RAHIM'S MINUTE OF DISSENT IN TAMIL

WITH A PREFACE BY

S. KASTURIRANGA AIYENGAR, B.A., B.L.,

Editor, *The "Hindu," Madras.*

Price—Rs. 2.

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"Vivekarama," Royapettah, Madras.

EDUCATIONAL POLICIES.

I.—THE HEADMASTERS' ASSOCIATION, LONDON.

The following "Educational Policy," drawn up by a Standing Committee of the Association of Headmasters, which included representatives of the Headmasters' Conference, has been adopted by the Association:—

I. ADMINISTRATION.

The authorities charged with educational administration are the Board of Education, the local education authorities, and the governing bodies of schools.

i. *Board of Education*:—(a) The importance of education as a national concern requires that the Minister of Education should be placed on a level in position and salary with the principal officers of State. (b) The functions of the Board of Education should be brought into relation with the whole national system of education, and should not depend merely upon the extent to which it acts as a distributor of public money and a controller of endowments. In particular the Board should be in a position to secure the co-ordination of the work of the local education authorities.

ii. *Local Education Authorities*:—The importance of securing a more effective development of the local organization of education cannot be over-estimated. The chief weaknesses of the present local authorities in this respect are timidity in the face of the ratepayers, and—especially among the smaller authorities—a lack of acquaintance and sympathy with the need for educational progress, e.g., the opportunities offered by the Act of 1902 for the development of a system of higher education have been in many cases missed. There is no obvious remedy; and for this reason educational progress cannot be separated from the general progress of the nation in imaginative political thought; and local administration depends in spirit and in practice almost entirely upon the average state of mind of the inhabitants of a locality with regard to political, social, and economic questions. Consequently whatever reforms in the local administration of education may be thought to be promising in themselves, it is useless to expect them to be effective except as part of a general movement in the direction of a more complete and a more intelligent organization of local affairs. It is hardly within our province to suggest what form should be taken by a general reconstruction of the system of local government; we may hold that certain educational reforms would be desirable if they came as part of such a general reconstruction, further than that we cannot go. The desire for improvement in the local administration of education has

led to the suggestion that large areas should be controlled for educational purposes only by a combination of local education authorities, acting through Provincial Councils, in some direct relation with the Universities. If such a system were to be instituted for local administration as a whole, then its advantages, whatever they might be, would be shared by education; but we are of opinion that to set up a separate system for education, divorced from the general aims, interests, and operations of the several localities, would tend, in the long run, to place it in an inferior position, and to alienate that public sympathy with educational progress which it is of supreme importance to encourage. Subject to this warning, we hold it essential that local education authorities should make full use of their powers to survey the total needs of the areas for which they are responsible, and to take such measures as will promote the systematic development within those areas of all appropriate forms of education. There is much to be done in the direction of discriminating between the lines of development suitable for town and country, and for districts which derive a special character from the predominance of particular industries and occupations; and this bears upon the organization of all education, but especially upon that part of it which immediately succeeds the elementary stage.

Certain principles may be laid down in this connexion;

(a) Elementary education should be considered as a preliminary or preparatory stage. It is not yet possible to require that no one shall be allowed to leave school in order to earn money before the age of 18; but it is possible to provide that no child's education shall wholly cease on its leaving the elementary school, and that up to the age of 18 education shall never be wholly subordinated to the ability to earn wages. (b) There must be a considerable increase (1) in the number of secondary schools—i.e., schools which provide some form of whole-time general education as distinct from technical training up to the age of 18, and (2) in facilities for part-time education. (c) The financial relations between the State and local authorities must be revised; and this on two grounds:—(1) The inability of local authorities to raise by rates sufficient amounts for necessary improvements; (2) the direct interest which the whole community has in the success of local organization. We should, however, regard with grave misgiving any readjustment of financial responsibilities which would tend to establish teachers in the status of civil servants. (d) In surveying the educational needs of an area it is important that local authorities should take into account and be prepared to recognize and where necessary to support existing institutions. (e) Local education authorities are too chary of applying the principle of devolution. One of the most valuable elements in educational organization is the governing body of a school, both as a means of preserv-

ing these traditional characteristics which prevent schools from becoming merely pieces of educational machinery, and as enlisted the active participation in the development of education of men and women interested in its problems and versed in the conduct of affairs. It is much to be desired that governing bodies should be established wherever it may be possible upon such a footing of independence as will attract men and women of real distinction to give their services. In schools, therefore, maintained or aided by a local education authority, the function of that authority should be limited to the exercise of administrative financial powers and a broad general control of the type of education provided; the administration of the individual schools should be entrusted to separate governing bodies. Such bodies should be entrusted with the fullest responsibility within the limits of necessary regulations, for the finance, the staffing, and the general organization of the schools. The official element upon them should not be too large; a governing body which is in effect a sub-committee of an education committee is sure to take an exaggerated view of the virtue of uniformity and to care little for the special character of the school entrusted to it. No one person should be a member of a large number of governing bodies. (f) The clerical and statistical work involved in the organization of a system of schools ought to be arranged in such a manner as to encroach as little as possible upon the time and thoughts of the teaching staff. In almost all schools secretarial help should be provided for the headmaster or headmistress; and this is not an insignificant detail; at present in many schools, and above all in elementary schools, the constant pre-occupation of the headmaster or headmistress with purely formal duties is a very considerable hindrance to efficiency.

iii. *Governing Bodies*:—It has been already suggested that greater emphasis should be laid upon the value of governing bodies even in the case of schools directly under the local authority. With regard to the governing bodies of independent schools there is little to be said; they do in the main represent and uphold that ideal of independent growth to which English schools owe more than can be easily described; there is one feature common to many of them which has possibilities that have not yet been generally recognized—their connexion with the Universities. The number of schools whose governing bodies contain *bona fide* representatives of Universities might with advantage be increased; and the mutual understanding between these schools and the Universities would, we think, be greatly helped by some systematic recognition of that connexion, for example, by the presentation to the Universities of periodical reports from their representatives upon governing bodies, or by periodical conferences of a formal character between

such representatives and the appropriate body in the University by which they are appointed.

II. FINANCE.

1. A greater proportion of the cost of education than at present should be provided from the National Exchequer, and the proportion decided on should bear some definite ratio to the sum spent by the local education authority, due regard being paid to the rateable value of each area. 2. No grant should be made from the National Exchequer to any local education authority or teaching institution, unless an adequate scale of salaries is in operation. 3. In the case of endowed schools not in receipt of grants from local education authorities, the grant should be paid to the governing body, subject to the same condition as to adequate scales of salaries being in operation. 4. The Board of Education grant should take the form of a block grant, whether it be made to a local education authority or to the governing body of an independent school, and should be adequate to meet the financial needs of the schools of the local education authority, or of the independent school concerned, in carrying out the educational programme of the authority or school as previously submitted to and approved by the Board. The Board should retain its power of withholding the whole or any portion of the grant. 5. The cost of pensions, apart from the contributions of teachers, should be borne by the National Exchequer.

III. TEACHING.

1. *Children under School-Age*:—There should be increased provision for the care of children under school-age (a) Through the instruction of parents in the conditions affecting the healthy development of young children and at the same time through the stimulation of parental responsibility. (b) Through the establishment where necessary of nursery centres and *crèches*.

ii. *Education in Schools*:—The weakness of English education in general lies in the fact that it does not inspire sufficient interest either in those who are being educated or in their parents. For too many are eager to leave school, and their parents to take them away, at the earliest possible opportunity; there is little desire for a continuance of education beyond the elementary stage, and little understanding of the truth that the education provided by any institution is imperfect unless it stimulates a desire for further progress. The cause is partly but not wholly economic; so far as it is economic the remedy lies in the general improvement of economic conditions; nothing else will touch it.

(c) *Elementary Schools*:—i. The most crying need is for reduction in the size of classes and a corresponding increase in the air space and ventilation provided in the class-rooms. This reform would in itself greatly improve the lot of the teacher; but in order to secure a solid advance in efficiency it is necessary that a great deal

more money should be spent in making the teaching profession attractive to competent persons by the provision of an adequate scheme of salaries and pensions in every area.

ii. The elimination from all schools of the unqualified teacher is necessary in the interests both of the children and of the teaching profession. iii. It should be made illegal for any child not incapacitated by ill-health to be withdrawn in any circumstances, except in order to pass to some form of whole-time higher education, before the end of the school term or quarter in which the fourteenth birthday falls. There should be adequate provision in elementary schools for all children remaining in the schools up to that age. For many years, at any rate, there is likely to be a residuum that will not stay long enough at school to make removal to a secondary school before the age of 14 profitable; it will be both to their advantage and to that of the elementary school if their whole-time education can be carried forward where they are.

(b) *Secondary Schools*:—In its widest sense secondary education includes all education between the elementary stage and the University stage; and although mainly for historical reasons secondary schools commonly stand for one type or variations of one type of education, the essential characteristic of post-elementary education should be the development of various types of schools so as to give the best possible chance to the most various kinds of ability. The one common feature must be that the aim is primarily educational—the harmonious development of the mental, moral, and physical powers. The imparting of the technical elements of a trade is not in itself an education; but to say this is not to deny that a great deal of the knowledge that lies at the foundation of every sort of trade and practical pursuit can be and ought to be laid under contribution for the building up of various sorts of educational courses. What matters is the motive. So long as education is recognized as the object the connexion between schools of all sorts and practical life cannot be too close; and the right understanding of this point of view would do much to dispel the indifference and even suspicion which have hitherto prevented the co-operation of the general public with those who are specially concerned in education.

The chief needs in respect of secondary education are:—(a) More extensive and more varied provision for children capable of profiting by a definite course of education up to the age of 18. (b) The encouragement and assistance of a much larger number of children to take full advantage of such provision. This involves the lengthening of school life by means of (1) the provision of adequate scholarships and maintenance allowances; (2) the requirement that all pupils who enter a secondary school shall continue in attendance at some such school until the age of 16. (c) As in the case of elementary schools, the expenditure of much more money in attracting competent persons into the teaching profession.

iii. *University Education*:—(a) In order to secure greater continuity of study and to avoid injurious overlapping there should be a more intimate connexion between the Universities and the work of the schools from which they draw their students, e.g., by the admission of heads of schools to a share in their counsels, by the institution of joint committees, and by subject conferences. (b) A considerable increase is needed in the facilities enabling students of ability to proceed to Universities who cannot afford to do so at their own expense. (c) There should be greater provision for research of all kinds. (d) Fuller recognition is needed of the relation of the Universities to the vital industries of the country, since it is part of the duty of a University so to train the scientific spirit and the constructive imagination that the best abilities of the nation may be available for its service. (e) The scholastic qualification for admission to a University should be simply the proof of ability to pursue with profit one or other of the courses of study provided by the University. (f) The fact of having passed a recognized school certificate examination, of such a kind as the first examination proposed in Circular 849 of the Board of Education or the school certificate examination of the Oxford and Cambridge Joint Board, should be sufficient proof of fitness for admission to a University, irrespective of the particular subjects endorsed on the certificate. (g) For private students and others who may be unable to produce such a school certificate the Universities should provide an entrance examination on similar lines.

iv. *Part-time Education*:—(A).—*Day Continuation Schools*.—It is necessary to make more general and systematic provision for the continued education in the daytime of all children who for any reason are unable to proceed to some type of secondary school. Children whose education ceases completely, even for a short time, so soon as they leave the elementary school, lose ground which it is almost impossible to recover. Part-time day schools, so organized as to meet all the needs of the period between the elementary school stage and the University stage, should be made generally accessible. (a) In view of the fact that many forms of day continuation school should aim not merely at technical training but above all at the continuation of general education and the fostering of a corporate life in the school, this Committee feels that the number of school hours should be not less than 12 hours a week for 40 weeks in the year. (b) It should be compulsory upon employers to make such arrangements as will ensure that no worker between the age at which compulsory attendance at elementary schools ceases and the age of 18 shall be debarred by long hours or exacting labour from taking full advantage of the educational opportunities so provided. The total number of hours assigned to education and employment together should not exceed the customary

number of hours of the working day. (c) In order that system of part-time education may be adapted to the needs of the community it is essential that the special conditions of each area should be fully considered, and that employers and employed—and the parents or guardians, in the case of the younger workers—should co-operate with the local education authority in this consideration, and should have an important share in determining the form which the system appropriate to their area shall take, and in the control of its working. (d) The practice of welfare supervision which has grown up during the war should be organized as a permanent element in the industrial system.

(B).—*University Courses*:—The work done by University extension courses and by such organized efforts as those of the Workers' Educational Association should be encouraged and assisted in every way. All such work should be brought into the closest possible relation with the spirit and practice of University teaching.

Technical Education:—We have not considered ourselves to be in a position to discuss technical education in detail, but we desire to record our opinion that the general education of all students should be carried as far as possible before they enter upon a course of technical instruction.

IV. SCHOLARSHIPS.

Scholarships and Free Places to Secondary Schools:—

(i) An increase in the amount of the contribution made from public funds is needed for scholarships, free places, and maintenance grants in order to encourage children to continue with whole-time education beyond the elementary stage. (ii) Boys should as a rule be transferred from the elementary to the secondary school about the age of 11. (iii) For the purpose of selecting boys for scholarships or free places:—(a) Every elementary school should be required by the local education authority to furnish to the awarding body a list of boys of not more than 11 years of age who are of more than average ability and fitted to pursue a secondary education; and all these boys should be submitted for examination. (b) This examination should be conducted in such a way as to give the headmasters of secondary schools a voice in the selection of the successful candidates. (c) Scholarships and free places should not be awarded on a written examination only but considerable weight should be given to an oral test. (d) To meet exceptional cases of late development provision should be made for awarding scholarships to children over 11 years of age but not over 14. (iv) Better provision of maintenance grants should be made where necessary, especially at the later stages, both to meet the positive expenses of education and to postpone the wage-earning stage. (v) Maintenance grants in all schools should be provided from external sources, whether out of public funds, or from specific endowments.

and should not be a charge upon the income of secondary schools. (vi) Fuller provision of boarding scholarships is required, to enable boys to attend schools remote from their homes, when this is for educational reasons desirable. (vii) Provision should be made for a more equitable distribution of scholarships and free places throughout the country, so that no child may suffer disadvantage through living in an area of low rateable value. (viii) Arrangements should be made for the transference of scholarships and free places in cases where parents change their residence from one area to another. (ix) No scholarship tenable at a day-school before the fourteenth birthday should cover more than free education, together with an allowance for books, and, if necessary, for travelling expenses. (x) In addition to entrance scholarships, there should be adequate provision of internal scholarships to be awarded to pupils about the age of 14 who are already in attendance at secondary schools, without restriction as to the original place of education of the scholars elected. (xi) To enable pupils to continue their course beyond the age of 16, there should be further provision of intermediate scholarships, to be awarded internally and without restriction as to the original place of education of the scholars elected. (xii) The examination for entrance scholarships to public schools should be brought into harmony with the non-specialized curriculum recommended under Section V. (xiii) As part of the educational provision for the area under their jurisdiction, the local education authority should include the maintenance of an adequate number of entrance scholarships for such children, not being ex-public elementary school pupils, as might otherwise from want of means have difficulty in entering a secondary school.

(C) *Scholarships to Universities and Places of University Rank.*—It is assumed that a system of scholarships from elementary schools will in one way or another carry the pupil on to the end of secondary school life. It is for the succeeding stage that there is most need for additional provision: (a) The existing system of scholarships awarded by the colleges of Oxford and Cambridge needs remodelling. The amount spent merely upon awards for merit should be reduced; and the initial annual value of a scholarship should be limited to £20, in order that a larger proportion of the sums available may be devoted to assisting scholars and others who cannot proceed to the University unless the whole or the greater part of the cost of the University course is provided for them.

(b) Scholarships provided from college or University endowments should be, where necessary, supplemented by local education authorities without further examination; and wherever this is done, care should be taken by the local education authority that the amount of its contribution shall be in each case sufficient to enable the scholar to avail himself fully of the advantages of a University education. (c) Financial aid, whether nominally in the form of scholarships or in the form of maintenance grants, should be provided, whether by the State, or by the local education authority, or by Universities or colleges in order that students of all ages who, though not reaching what is ordinarily meant by scholarship standard, are yet capable and desirous of profiting by University education, may be enabled to proceed to Universities.

(d) The expression "places of University rank" should be liberally interpreted, and should include such institutions as medical schools and agricultural colleges. (e) Further provision is needed for post-graduate research, on the lines of the Beit Fellowships and of the Board of Agriculture Research studentships. (f) In awarding scholarships (with the exception of research scholarships) more importance should be attached to discovering whether candidates have received and profited by a good general education than to rewarding knowledge of a particular subject. The basis of scholarship examinations should be broadened by encouraging a combination of subjects—e.g. (i) Classics with a modern language or a branch of science; (ii) History with a modern language or languages; (iii) Mathematics with a modern language; (iv) Science with a language. Further it is essential that pressure should not be put upon the scholar to take his degree in the subject or subjects in which he has gained his scholarship.

V. CURRICULUM.

The construction of a good curriculum is important at all stages, but perhaps above all at the stage covered by secondary schools. (a) One of the most serious dangers to secondary education lies in the overcrowding of the time-table through the conflicting demands of an ever-increasing number of subjects. In framing curricula the first consideration should be to guard against this overcrowding, and to ensure that sufficient time is available for the adequate treatment of the subjects which are taught. (b) No boy should be allowed to specialize until he has attained a satisfactory standard of general education. (c) This standard should be that which a boy of ordinary ability may be expected to reach at the age of 16. (d) The subjects of a general education should include

as a rule Scripture, English, History, Geography, Mathematics, Science, and ordinarily two languages other than the pupil's own—in most cases these should be French and Latin. It is understood that there will be efficient schools in which only one language other than the pupil's own is taught. (e) Suitable provision should be made in school time for physical training, music, drawing, and some form of manual instruction. (f) Time should be provided in the school curriculum for military training.

VI. TRAINING OF CHARACTER.

(1) While the work of the class-room affords much opportunity of developing individual character, especially by the formation of habits of determination, accuracy, and punctuality, the development of a corporate school life is an essential part of the training for the wider life of the community. For this training to be valuable the senior boys in a school, whatever their age, must be taught to accept responsibility, and to control and lead others. (2) It is of the utmost importance that all children should receive a sound religious training, both at home and at school; such training gives the true foundation for the building up of moral character and unselfish citizenship. There is no side of education in which hearty co-operation between parents and teachers is more necessary or more fruitful.

VII.—CARE OF HEALTH.

The two chief needs in this connexion are:—(i) Opportunity and space for healthy exercise; (ii) supervision of health through a school medical service. We have already stated our opinion that a place for physical training should be found in the school time-table; this is desirable in all schools, but the provision of ample space for games is of at least as great and as general importance. The further development of the work of the school medical service is also greatly needed. All schools, elementary and secondary, public and private, should be medically inspected; and all pupils also should be medically inspected at least once a year by a school medical officer, who should be in close touch with the head of the school, with the parents.

VIII.—EXAMINATIONS AND INSPECTION.

Since the issue of the Report of the Consultative Committee on this subject in 1911, no single educational expedient has received more careful nor more fruitful consideration; and we may hope that we are within measurable distance of having a complete system of external examinations which may be a help rather than a hindrance to education. (a) The chief conditions necessary for the realization of this ideal are (1) that

examinations should be based upon the work of the schools, and (2) that professional bodies as well as Universities should agree to accept, without further educational test, students who both through inspection and through examination can be certified to have reached an approved standard. (b) The closest possible co-operation between teachers and examiners should be secured by some or all of the following methods:—

(1) The adequate representation of active teachers on examining bodies; (2) the acceptance of the school syllabus as the basis of examinations; (3) the taking into account, for the award of certificates, of the school's estimate of the work of individual pupils. (c) In the selection of inspectors, much more regard ought to be paid to successful and varied teaching experience extending over several years. Conferences on particular branches of work under the direction of the Board of Education might usefully take the place of much of the work that is done under the present system of inspection. (d) No school should be recognised for the purpose of Attendance Acts and bye-laws, unless it is inspected and has been pronounced efficient by the Board of Education; such inspection to include in its survey the qualifications of teachers and the adequacy of school buildings. (e) Schools which are recognized as efficient by the Board of Education and whose efficiency is assured by the Board's inspection should not be required for any purpose to submit to inspection by any other body or authority.

IX.—CIVIL SERVICE EXAMINATIONS.

It is a matter of urgent necessity that the Civil Service examinations should be remodelled and brought into organic relation with the education of the country.

X.—INTERNAL ORGANIZATION.

(a) Schools should be permitted so far as possible to develop along their own lines and in accordance with their particular aims and conditions. (b) The position and function of governing bodies have been already dealt with; it remains to state that in our opinion the head of every school should have the general control of the internal organization, management, and discipline of the school, including the choice of books, the methods of teaching, and the arrangement of school hours.

XI.—SUPPLY AND TRAINING OF TEACHERS.

The present difficulty of obtaining a sufficient number of trained teachers, and the prospect of an increase in that difficulty accompanied by a great increase in the demand for teachers, make this one of the most impor-

tant of all educational questions. At present the supply of teachers for elementary schools is quite unequal to the demand; the supply of trained teachers for secondary schools is negligible. The causes, 'particularly in the latter case, are partly and chiefly the cost of the training and the unattractiveness of the profession compared with others open to persons of equal ability and education' but partly also the fact that much of the training now given does not inspire confidence, because it seems to fall in securing a reasonable expectation that the trained teacher will be able to teach.

(i) More stress ought to be laid upon general education as a necessary preliminary to technical training; and in the consideration of the training proper to elementary and secondary teachers it should be recognized that the same general principles apply to both. (ii) It is not possible to expect an increase in the number of men and women prepared to offer themselves for courses of post-graduate training unless considerable financial assistance is provided for the individual candidates. (iii) The present grave crisis in the supply of teachers is not to be met by a system of doles to parents in the shape of maintenance grants, &c., to children during school life conditional on a pledge to enter the teaching profession, but by making the teaching profession desirable in respect of salaries, prospects of advancement, and pensions. (iv) A great development of educational research and experiment is much to be desired, not only in special schools, but particularly in connexion with every kind of normal educational practice.

J. R. WYNNE-EDWARDS, *President*.

R. F. CHOLMELEY, } *Honorary*
W. JENKYN THOMAS, } *Secretaries*.

87, Norfolk-street, London, W. O. 2.

II.—ASSISTANT MASTERS.

The following statement of policy has been drawn up by the Association of Assistant Masters in Secondary Schools (the A.M.A.):—

ADMINISTRATION.

A.—*Central Administration*.—(1) The State should be the ultimate authority for education. (2) The financial responsibility for education should be determined by the State, which should be directly responsible for the provision of the salaries and pensions of teachers. (3) The national system of education should be administered by a Ministry of Education, consisting of a Central Council of Commissioners, presided over by a Minister of Education, with a permanent official as Secretary. (4) The Minister, the Permanent Secretary, and all members

of the Central Council, should be men of experience in teaching or in organizing education. (5) The Minister of Education should be of Cabinet rank. (6) The Central Council of Commissioners should include members of experience in educational finance. (7) Its members should be nominated in suitable proportions by the Teachers' Registration Council, and by the leading professional, technical, industrial, and commercial bodies.

B.—*Local Administration*.—(1) For the purpose of local administration the country should be divided into provinces, each to contain a correlated system of educational institutions, with a University at present existing, or to be created, as its centre. (2) The educational system in each province should be made complete, and kept efficient, by a Provincial Council, presided over by a member of the Central Council of Commissioners. (3) The teaching profession should be adequately represented on all bodies which control, or administer education. (4) Existing institutions, whose interests are national rather than local, should be outside the control of the Provincial Council, but under that of the Central Council. (5) The provincial education authority should consist, as to one-half, of representatives of all branches of the teaching profession, and as to the other, of representatives of local interests. It should be responsible for the upkeep of the buildings and the equipment of schools, and should provide schools of various types, to suit the needs of various localities. (6) There should be formed in areas to be defined by the Provincial Council local committees of a purely advisory character, representing local authorities, parents, teachers, and others interested in each school or group of schools.

ORGANIZATION.

(1) The national system of education should provide for the compulsory full-time education of every child up to the age of 16 years at least. (2) The national system should provide for:—

(a) Elementary education up to the age of 12.

Age 12 to 16:

- (b) (1) Full-time secondary education; or
- (2) Full-time technical education (see note); or
- (3) Part-time secondary and part-time technical education; or
- (4) Higher elementary education (including rural education) in the elementary school.

Age 16 to 18:

- (c) (1) Continued secondary education; or
- (2) Continued technical education; or
- (3) Part-time daytime education in trade or technical schools,

Age 18 to 21:

- (d) (1) University education; or
- (2) Higher technical education in University institutions; or
- (3) Education in part-time schools.

The time for transference from elementary to secondary or technical education should be determined by standard rather than by age. Some pupils will reach the necessary standard at age 10½ to 11, others at age 11½ to 12. In general, transfer should not be postponed beyond the end of the 12th year of age. Boys who are not so transferred should receive higher elementary education in elementary schools. Full-time technical education—(b) (2)—should be mainly education of a general character, with a technical bias. Rural education in agricultural schools should be provided in rural areas as part of the technical or higher elementary education in the stage 12 to 16 years. The child's progress in, and capacity to profit by, the type of education he is undergoing should be reviewed annually. Arrangements for transfer from any one type of education to another should be provided. The right of the parent to choose the type of education after the elementary stage should be given due consideration. Where, as a result of the annual review indicated, it is found that a boy would be likely to profit more by education of another type, he should be transferred, subject to the consent of his parents. Continued secondary education, from age 16 to 18, should be preparatory to (a) University education, or (b) business or professions. Continued technical education, from age 16 to 18, should be preparatory to (a) higher technical education, or (b) skilled occupations. Part-time education, at age 16 to 18, is intended to apply to those who enter employment at age 16. It is essential that education should be continued as part-time education, which should be taken in the daytime, arrangements being made by employers for the release of the boys for this purpose.

(3) No child who has shown capacity to profit by a course of secondary education should be refused admission to the schools, even if the child has to be fed and clothed at the public expense to enable him to attend. (4) No institution should be permitted to receive pupils below the age of 16 years, unless it has been recognised as efficient for the purpose by the Ministry of Education. (5) No child should be allowed to enter any national secondary school unless he can produce either a certificate of competency signed by a registered teacher, or other satisfactory evidence. (6) All unnecessary overlapping

between (a) elementary and secondary schools, (b) secondary schools and Universities, should be abolished. (7) No boy should be promoted from a lower form or set to a higher form or set until his teacher considers, or his teachers are agreed, that he is capable of profiting by the work of that higher form or set. (8) Bursaries of sufficient value and number should be provided, to ensure that no boy capable of profiting by a University course should be debarred from doing so on the score of insufficient means. (9) No boy should be promoted from the secondary school to the University without a certificate of competency signed by the registered teachers actually in charge of his education, or other satisfactory evidence, such as might be afforded by a school record. (10) Every secondary school should be so equipped as to be able to provide for the education of children up to the age of 18 *plus*, in all branches of the curriculum. (11) No boy should be admitted to a University under the age of 18.

CURRICULUM.

I.—*Physical Education*.—(a) Every school should be under effective medical supervision. (b) On the staff of every school there should be at least one fully-qualified instructor, responsible for physical training. (c) The course of physical training should include organized games, drill, and gymnastics, together with the necessary instruction in elementary physiology and hygiene.

II.—*Mental and Moral Education*.—(1) In the drafting of the curricula for schools, greater attention should be paid to the needs of the average boy than at present. (2) The curricula for pupils up to the age of 14 *plus* should be confined to the following subjects, which should be correlated as far as possible:—(a) English. The aim being to develop the power of self-expression and the appreciation of good literature. (b) History. (c) Geography, which should have a definite place as a connecting link between the humanistic and scientific sides of the curriculum. (d) Elementary mathematics and general elementary science, to be closely linked together. (e) Drawing in colour and line. (f) Modelling, woodwork, and other handwork. (g) Class singing. (h) Languages other than English, provided that a pupil should not begin the study of more than one language in any one school year. (3) After the age of 14 *plus*, the pupil may be allowed to pursue a more extended study of particular subjects, or may take up some new subject or subjects. (4) Some course of teaching should be introduced after the age of 14 *plus*, with a view to developing the pupil's appreciation of the rights and duties of a citizen. (5) The writing of good

patam would exactly answer to this description of the city by Nuniz; and the fortress of Sivasa mudram which was a strong citadel and one of the capital cities of the chief of Ummattur was captured by the King, after he overran the Dravida country. The equation of Catuir with the Kadava country would answer to the description of Nuniz in every detail except that of time, which mistake might possibly be due to Nuniz himself.

(2) The Raya's campaign against Orissa (1514-16) which was only the latter part of a continuous course of action which formed his early military activity is shown here to fall into three distinct episodes: (a) the siege and capture of Udayagiri, (b) the capture of Kondavid and other forts, and (c) the conquest of Telingana and the march upon Kalinga. Nuniz's account of the campaigns is shown to be 'inadequate in respect of the main episodes, and inaccurate even with regard to its general trend.' Nor is Mr. Sewell very clear or even detailed on these points. All the epigraphs of the reign begin his conquests on the East with the capture of Udayagiri and close it with his setting up a pillar of victory at Simhachalam. Krishnadeva's advance to Simhachalam has however been complicated by a couple of verses of Peddanna in his 'Manucharita,' as having driven the Gajapati into the Vindhya Hills. This has been regarded by Mr. Krishna Sastri as warranting another invasion of Orissa or at least a continuation of the one which actually terminated at Simhachalam.

(3) The third important point cleared up is that of the campaign and battle of Raichur (1520). Mr. Sewell in estimating the value of the various accounts of the battle finds it more reasonable to trust in Nuniz rather than in Ferishta (p. 153, 'A Forgotten Empire'); while substantially that part of Nuniz's narrative alone which relates to the battle and the siege of Raichur bears the impress of a personal reminiscence. The disproportionately large space devoted by Mr. Sewell to this campaign is rendered anomalous by the fact pointed out by the author, *vis.*, the very small importance given to it in the vernacular literature, even in the 'Krishnaraja Vijayamu.' "The actual course of events would seem to be that the Adil Shah made an attempt to recover Raichur, and began operations by creating a party in his favour in Raichur, and throwing in a powerful garrison. Krishna laid siege to the fort and attacked the enemy in the field. Defeating him in battle, he captured the town. Returning to head-quarters he undertook a raid into Bijapur territories with a view to striking terror into the heart of the enemy and bringing him to terms with but partial success."

Other points like the refutation of the story of Nuniz concerning Krishnadeva's abdication and his minister Saluva Timma's treason and the explanation for the delay in the King's coronation—these also call for our attention. The pamphlet together with the author's previous work on Vijayanagar "A Little Known Chapter of Vijaya-

nagar History. 1450-1509," will best serve as a supplement and corrective of Sewell's book, and embodies the latest conclusions of research-work in this field.

BRITISH FOREIGN POLICY IN EUROPE TO THE END OF THE NINETEENTH CENTURY, BY H. E. EGERTON. (MACMILLAN & CO.) 1917. pp. x & 440. Price 6s. net.

Mr. Egerton has essayed in this book to trace the history of the European politics of Britain apart from a mere narrative of events and to put forward the views of past British statesmen and others who actually took part in these matters. Up to 1800, the treatment is relatively meagre; while questions affecting America and the Far East are intentionally left out. One of the main objects of this book is to refute the charge so often made by German publicists and historians that the 'past history of British foreign policy has been conspicuous for its display of perfidy and unscrupulousness.' It is proved in this book with conspicuous success that though British statesmen might have been often wrong-headed and mistaken, their policy on the whole has been singularly honest and straightforward; and that it would be unfair to judge of English policy from isolated acts were the results of aberrations either individual or national. A chapter devotes itself to the task of explaining the relation of English sea-power to other States. And though it is impossible to deny that sometimes they used their power to alarm and alienate the neutrals, and their right to search neutral vessels was sometimes carried to violent extremes, yet in times of peace that power was used always for noble purposes—most usefully to put an end to that blot upon civilisation, *vis.*, Slave-Trade. And in 1856, England accepted the *Declaration of Paris* in a chastened spirit and revoked those rules of search which she had formerly declared to be essential to her very existence.

The history of England's European politics is traced from about the middle of the reign of Elizabeth. The whole of English policy during the 17th century is shown to be one continuous conflict between the desire for union with the Protestant Dutch and war with them—the consequence of their bitter commercial rivalry. Charles II's shameless policy and tortuous diplomacy should not be fastened on to the back of the nation; and even he was sincerely desirous of promoting English interests so far as they were compatible with his own. The active English championship of the idea of balance of power is shown to begin really with the accession of William III; and the whole of the century between 1689 and 1789 is portrayed as an almost continuous resistance to French world supremacy with intermittent attempts at *rapprochements*. It is shown to be uncharitable to suppose that Britain would have abandoned the cause of Frederick the Great sooner than in 1762, had it not been for his victories. Prince Bismarck actually attributed his distrust of England to the desertion of Frederick in 1762 and declared in direct contradiction to facts,

that England respects the rights of other States only so long as English interests are not touched. Nor is it generous or even just to suppose that England entered into the French Revolutionary War with the sole object of attaining to commercial and maritime supremacy. "Great Britain entered upon the Great War with clean hands, and that so far from having secret motives of ambition, her Prime Minister recognised in peace the chief British interest. Very different unhappily was the situation of other parties to the alliance, formed against Revolutionary France; and just as the speed of a battle-fleet is decided by its slowest member, so the moral force of the alliance was impaired by the conduct of any of its members" (p. 104). Again we have to remember that the Peace of Amiens might have been unwise, but at least it involved no betrayal of the interests of other nations. Even at the time of the infamous Holy Alliance England determined that there should be no suppression of the Revolutionary principle in the Spanish Colonies at least. Palmerston who directed foreign affairs in most of the period between 1830 and 1865, though often misguided and headstrong, was actuated by an honest hate of tyranny and of all wrong. England however seriously blundered in the Schleswig-Holstein question. "On the general question how far we were bound by treaty or by undertaking to assist Denmark, the answer seems to be that inasmuch as there was no direct guarantee contained in the treaty of 1852, we were not bound to come to her aid. Neither does there ever seem to have been a direct promise to that effect. But Lord Russell's fussy and interfering diplomacy undoubtedly led to the impression in Denmark that England would intervene by arms on her behalf, so that no average Englishman can look back on the history of the business without shame." (p. 277).

Both Germany and France bitterly complained of the action of England during the war of 1870-71. Bismarck pretended to believe that England should have prevented the war; and the French regarded that England had shown herself hostile by attempting to circumscribe the area of hostilities. In the new Europe which emerged from this war, the road to permanent peace was even more insecure. Beaconsfield's perspective of the consequences of the Treaty of Berlin has been demonstrated by recent events to have been wholly mistaken. The attempt to create in an Austrian Bosnia and Herzegovina a barrier to Slav aggression has only created a greater and far more formidable danger than Slav aggression. It was only slowly that Englishmen realised that Britain could hold her own in European politics, only if she spoke as the British Empire and not as a little island. In more recent times, 'so far as European politics are concerned, it was India and the position of India as a British possession that dominated the situation.' The close of the 19th century witnessed Great Britain forming an *Entente* with France which as time went on, took the character of a genuine alliance.

PUBLICATIONS RECEIVED.

- Lamb's Tales from Shakespeare, Edited by A. R. Weekes, M.A. London: Clive. 1s. 4d.
- British Foreign Policy in Europe to the end of the 19th century, by H. E. Egerton, M.A. London: Macmillan. 6s. net.
- Intermediate Text-book of English Literature, Part I, by A. J. Wyatt, M.A., and W. H. Low, M.A., Revised by C. M. Drennan, M.A. London: Clive, 4s.
- The Sanskrit Primer, by P. S. Anantanarayana Sastri. Trichur: Mangalodayam & Co. 3 as.
- Vakyathathwam—A small Treatise on Sanskrit Syntax and Composition, by P. S. Anantanarayana Sastri. Trichur: Mangalodayam & Co. 6 as.
- Tharka Sara, by P. S. Anantanarayana Sastri. Trichur: Mangalodayam & Co. 6 as.
- Moral Science—A Handbook of Moral Education and Formation of Character. The Good Pastor Press, Madras. Re. 1-4.
- Water in the Economy of Nature, by F. D. Murad M.Sc., B.A. The "Teacher" Office, Dinga.
- The Pallavas, by G. Jouveau Dubreuil, translated into English, by V. S. Swaminatha Dikshitar, B.A., L.T. The Author: Pondichery Rs. 2.
- Education—Selective, Specific and Compensatory, by Michael West, I.E.S. Bombay: Longmans. Rs. 2-8.
- Advanced English Composition, by Michael West, I. E. S. Bombay: Longmans. Rs. 2.
- Our Sea Power, by H. W. Household. London: Macmillan. 1s. 6d.
- Main Currents of European History, 1815-1915, by F. J. C. Hearnshaw, M.A. LL.D. London: Macmillan. 7s. 6d. net.

Indian Educational Notes.

Anniversary of the Taylor High School, Narsapur.—The sixty-fifth anniversary of the Taylor High School, Narsapur, was celebrated with great eclat on the 2nd instant under the presidency of W. B. Brierley, Esq., B.A. (Cantab), Inspector of Schools, II Circle, who was there to inspect the school.

The main hall of the school in which the public meeting was held was tastefully decorated with flags, festoons and evergreens. The hall was packed to the full. Among those present were Miss Pring; Miss Morgan; Rev. E. B. Bromley; Messrs. C. E. Hill; M. Venkanna Naidu Garu, B.A., B.L., President of the School; C. Veeraswamy Iyer Avl., B.A., B.L.;

The Educational Review.

Among matters that came up for discussion before the last Senate Meeting, there are subjects of special educational importance. Among them comes in the adoption of the regulations for the B. Sc. degrees, both Ordinary and Honours. It is to be noted that the Committee specially appointed for drafting regulations relating to these have come to the conclusion that it would be impossible that the colleges teach for both B.A. and the B. Sc. degrees in these branches without considerable increase in staff and accommodation. We are inclined to agree with the Committee in regard to this particular point, as it would have meant an unnecessary duplication of work, and multiplication of degrees for practically the same course of studies. The chief reason for the institution of the B.Sc. degrees, in preference to the existing B.A. degrees, lies in the need that was keenly felt for ridding the examinations of the octopus of a highly technical course of English which has proved detrimental to the interests of Science studies. To that extent we welcome the regulations as tending to limit the course of English to its proper place as a mere medium of instruction and examination, the position which it was ostensibly given under the new regulations. While admitting in the fullest degree the necessity for a good working knowledge of English, we still take the liberty to differ from the chief exponents of English in the Senate that a good

working knowledge does not necessarily involve all the paraphernalia of linguistics in English. We wish this were extended to the other branches of the B. A. Examination by confining the course of English to modern English alone and reducing the quantity somewhat with a view to enabling students to pay much more attention to their special branches of study.

Another matter of equal importance, but of far more emergency, had similarly been referred to a Committee: We mean the revision of the Intermediate courses of study. The meeting held on March 10, 1917, which referred this question to a Committee made it clear in the discussion that while most of the Boards, excepting that of Natural Science, had done something to lighten their courses, further lightening was called for, so far as the Intermediate was concerned, in English. Instead of clearly stating it as the opinion of the Senate that the course in English required revision with a view to lightening it in respect of the quantity, and even of quality, to a certain extent, the resolution was put in a more general form. The disappointing result of the reference to the Boards of Studies must have been expected. We wish the problem were more honestly faced, and the question considered in all its aspects with a view to providing the necessary relief to the students, the need for which nobody with teaching experience would question. We have not the slightest notion of asking for a reduction of the standard, but we are firmly convinced that the standard of

proficiency in English could be maintained by a considerable reduction in the quantity that students have to get through in their course, and so framing the questions and regulating the examination as to discover what a student is capable of doing by way of expressing himself in English without the subtleties of psychological study of character and development. This is a matter of emergency and calls for action immediately to remove the scandal of the enormous failures in English that takes place at the University. Where every individual branch of education is the matter under discussion, one gets the impression from such information that responsible authorities place before the public, that the efficiency of that branch is steadily on the rise, as for instance Secondary Education. But the contrary is stated with equal authority when this very question of efficiency comes in another connection. This is hardly a proper way to look at a question. The courses framed ought to be courses which are capable of being worked through by honest, but average, intelligence. This course, at the same time ought to be such that while it meets the demands of the average, provides facility for the exhibition of higher talent where it exists. We are of opinion that the course in English does demand too much of the average student entering the University course and is not framed suitably to give the chance to the average man, and at the same time, it is not all that one would desire in respect of higher talent.

We pass on next to another matter of great importance on which there was a considerable amount of discussion in the Senate. We mean Mr. Kuppuswamy Sastry's motion to adopt the revised draft regulations for the Oriental Titles Examination. The draft regulations, except making a few minor changes, did not call for any revolutionary change from the regulations as they exist at present. The main point that came in for considerable comment from various members of the Senate was the provision that was being made for the correlation of a certain amount of Western critical methods in the course. A certain amount of knowledge of English is prescribed as necessary for the course, and the possession of that knowledge has to be exhibited in an examination test by the Pundit candidates for these titles. The revised regulations of Mr. Sastry sought merely to give the Syndicate power to exempt candidates from this examination test without attempting to exempt them from the course itself. This will be seen by reference to Regulation 22 of the draft.

Mr. Hunter's amendments in effect would make the examination test quite obligatory, and would not give any discretion to the Syndicate at all in this matter. Having regard to the position of Sanskrit education in the country and the demand made upon the Pundit aspirants to these titles, the demand made was, in our opinion, far too severe and absolute. The courses laid down in Sanskrit involve a considerable amount

of study on old lines before these Pundits come to the colleges that prepare candidates for these titles examinations. In the great majority of cases of such, the study of English begins much later in life than it does to the average English students coming up to the University. The chief difficulty in the mastering of an amount of English lay in this, that beginning so late the Pundits labour under very grave difficulties in mastering the new idiom sufficiently to be able to express themselves faultlessly for purposes of examinations, while it enables them, with certain imperfections no doubt, to labour through works on technical subjects with the matter of which they are familiar in their own languages. The question therefore is whether for a really useful acquaintance with the methods of modern critical scholarship in oriental languages, an examination test is really a necessary test, as was pointed out in the Senate by both Professor Krishnaswami Aiyangar and Mr. K. Ramanujachariar of Vijayanagaram. There are ways of making acquaintance with Western methods other than by means of English alone, and what is really to the purpose is not a capacity to pass, what in this case might prove, a too stiff examination test. A great deal was sought to be made of pretensions to acquaintance with modern critical scholarship where really none existed. It is really too much of a good thing, a real critical scholarship in these languages at the present time would require more than a knowledge of Eng-

lish, perhaps in this particular branch a knowledge of German would be more useful. While therefore a sufficient acquaintance with English for the purpose of appreciating the work of Western scholars on matters relating to the various technical subjects should come under the course, it would be possible to bring this in without a necessary examination test. It may prove in some cases that the examination test might prove a stumbling block to a really capable class of the Pundit, who ought under no circumstances to be allowed to die out. It may be possible as Mr. Ramanujachariar pointed out to pick up a considerable acquaintance with the methods and work of Western critical scholarship, without any acquaintance with English at all. While such acquaintance may be insisted upon in the course, it is something very different from insisting upon an examination test with all the vagaries that it involves. Doing this is not perpetrating a 'fraud' upon anybody. A Pundit is a Pundit and will be one, and is not likely to be mistaken for an Honours graduate. We do not believe the real Pundit would care to pass for an Honours graduate, although as a Pundit he may not get the value in rupees, annas and pies, that perhaps the Honours graduate would get. There is no fear of such a 'fraud' under any circumstances, we believe, and to us it appears this was merely a bogey raised, to come in the way of what after all seems to us but a very slight, but none the less necessary, discretion which

ought to vest in the Syndicate. We hope the Committee with the useful addition of Mr. Justice Coutts-Trotter will see their way ultimately to adopt this reasonable attitude rather than take up the one which Mr. Hunter's motions would, as a consequence, involve whether he actually means they should or no.

In spite of the unfortunate fate which **Elementary Education** met the Elementary Education Bill of the late Hon. Mr. Gokhale, it is clear that the cause of elementary education is gaining ground in the various provincial legislatures of India. The latest evidence is furnished by the proceedings of the recent meeting of the United Provinces Legislative Council, at which the Hon. Munshi Narayan Prasad Asthana moved the following resolution: "That this Council recommends to His Honour the Lieutenant-Governor that a Bill empowering the Municipal Boards to introduce free and compulsory education in Municipal areas be brought forward before the Council at an early date." The Government did not find it possible to accept the resolution in the form in which the Hon'ble member moved it, but was willing to adopt the following amendment: "That a Committee of members of Council be appointed under Rule 13 of the Rules for the Conduct of Business to consider the advisability of legislation for the purpose of enabling Municipalities to make primary education compulsory in Municipal areas." The Hon. mover having ac-

cepted the amendment, it was carried as the substantive motion, after the Council had the benefit of several illuminating and suggestive speeches on the subject, among them, one from the ever-vigilant Hon. Mr. C. Y. Chintamani. An idea of the great need there is for improving the spread of elementary education in the United Provinces can be realised by statistics showing their backwardness among Indian provinces. While the average of literate persons for one thousand is 75 for Madras, it is 34 for the United Provinces and with a population more than that of the Madras Presidency they have 9258 institutions for primary education for boys against 24044 of Madras. The average number of towns and villages again, served by each boy's primary school is 11.5 in the United Provinces while it is 2.2 for Madras. The number of pupils receiving primary education in the United Provinces, according to the latest educational statistics is only 5,73,900 while it is more than double that figure in Madras and the expenditure on elementary education also bears a similar ratio. As we have pointed out on more than one occasion it is not enough if Bills are passed empowering Municipalities to introduce free and compulsory elementary education in their areas, as their present financial circumstances will not enable them to take advantage of the recommendation. As all the work cannot be expected to be done absolutely by Government aid in the present circumstances of the country, an earnest attempt must be made to

meet the increased financial demands of the new situation by unhesitatingly imposing an educational cess and by taking other similar measures.

We are afraid Sir Rabindranath Tagore goes beyond his depth in venturing upon a rather sweeping condemnation of the Indian Universities of to-day, in his article on the *Medium of Education* in the current number of the *Modern Review*. In spite of the excellent record of service which our Universities have to their credit during the comparatively short existence they have had, we are told that they are all "machine houses" by the side of which Sir Rabindranath hopes to plant "living things." The poetic vision is conjured up before us that without fuss or argument, the latter will one day raise their heads and overshadow their unsightly neighbours with a wealth of foliage and bloom. While the educational mill is noisily grinding out its bales for the market we are assured that the living tree by its side will give fruit and shade to the country and shelter among its numerous branches to any number of singing birds. We confess that all this seems poetical, but find it rather difficult to rest our hopes for the future of higher education in India on these vague visions. The "most unkindest cut of all" is the remark that no compromise is possible with the lumbering old machine. "Let it be relegated," he writes, "to a place among our law-courts and offices, police-stations, jails

and asylums and other paraphernalia of civilisation." If the new era of educational glory imagined by the poet is to come only when this paraphernalia of civilisation disappears, we may rest assured it will never come, or it will come if the prophet of Bholpur will help us to realise Gonzalo's ideal commonwealth where there should be

No name of magistrate;
Letters should not be known; riches, poverty,
And use of service, none; contract, succession,
Bourn, bound of land, tilth, vineyard, none;
No use of metal, corn, or wine, or oil;
No occupation; all men idle, all;
And women too, but innocent and pure;
No sovereignty.

We are not surprised at the feverish and over-enthusiastic attempt made by the *London Times* to make out that in the outgoing Secretary of State, India has lost a statesman of great ability and achievement. But we are amused at the futile attempt made by the *Educational Supplement* of the paper to point out his varied and distinguishing services to the cause of Indian education. His first great achievement according to the journal is the obtaining of an Act for modifying under War conditions the statutory requirement of recruitment of the Indian Civil Service, solely by the method of competitive examination. The appointment of Dr. Arnold to succeed Sir Charles Mallet and of Mr. N. C. Sen to succeed Mr. Arnold is the other great achievement! We trust that when the time comes for the *London Times* to

notice the retirement of the next Secretary of State, some attempt will be made to maintain a due sense of proportion and recognise the immensity and multitudinous variety of Indian educational problems. In the meantime those in India may be pardoned for not going into ecstasies over this statement of what the *London Times* has chosen to style with a good deal of boisterousness, if not with equal truth, "Mr. Chamberlain's record." Frankly, we demand a more solid and comprehensive record of educational work for India.

The unseemly wrangle that has taken place during the recent meetings of the Senate of the University of Calcutta over the case of Prof. Hamilton, the University Professor of Economics, must make Indian Universities ponder more carefully on the choice of University Professors as well as on a clear definition of the duties to be imposed upon them. The demand was made that Prof. Hamilton should be requested to resign his appointment on the ground of his not having been able to discharge the duties expected of him. Two considerations involved in this affair seem to deserve special attention. In the first place, the duties expected of the University Professor of Economics by the Senate of the University of Calcutta seem to be beyond the physical capacities of the normal human being. He is supposed to deliver 30 public lectures, suitable for subsequent publication in book

form. He has to hold classes in economics not less than twice a week for 25 weeks in the year for the benefit of post-graduate students. Over and above this he has to prepare an original work on the application of economic principles to Indian topics. If the Senate found that Prof. Hamilton could not discharge all these functions, the fault was probably not entirely on his side. Again, the selection of University Professors must be done with such great care and deliberation and with such intimate knowledge of the ability, habits, industry, and past record of work of the persons, that there should not be the unseemly sight of a University asking for the dismissal of one of its professors. Prof. Hamilton's case has a lesson to teach to the other Universities in India, including that of Madras, and we hope they will profit by it. We may also add that the stimulation of research among the post-graduate students of a University, for which a University professor is mainly engaged, is a matter whose accomplishment cannot be judged by any concrete production, as tangible as an edifice reared by the genius and industry of an architect.

Amidst the conflicting reasons that are being put forward in the Madras Presidency to explain the abnormal failures at the Intermediate examination, we find that an educationist correspondent to the *Hindu* has emphasised the zealous and premature participation of students in politics. "One great factor

Students and Politics.

of New York, there were during the year 2,122,305 students attending educational institutions of all grades and 59,733 teachers while the expenditure on education during the year was \$96,373,330. The net value of the buildings and equipment of the various educational institutions was estimated at \$422,786,848. Two special features of the educational system of the State deserve prominent mention. One is the existence of a large number of libraries scattered over the entire State, there being as many as 537 excluding the main State library with 350,000 books. Almost every school and village can boast of a fairly respectable library where readers have the additional benefit of being guided by an Assistant specially trained in library work. Pleasing evidence of the desire of the State to bring books within the reach of the entire population is the provision for the sending of books at State cost on the requisition of any respectable individual. The machinery to enforce the provision of compulsory education in the State has reached a most enviable perfection. A monthly census of children of school-going age in all the houses of the State ensures their attendance at school while no boy or girl is allowed to leave school for employment, without getting a certificate of discharge at the proper age. Not the least valuable part of the work of the Education Department is its constant publication of bulletins and reports which form valuable educational literature in themselves.

Special Curricula for girls.

At the ensuing meeting of the Faculty of Arts of the Benares Hindu University, it will consider a special course of studies for girl students in the College Department prepared by Miss K. Browning, M.A. It is being realised in recent years even in Western countries that the education of girls must specially fit them for duties peculiar to their spheres of activity. Among the reforms urged upon the educational authorities in England to-day is the imparting of instruction in domestic subjects to girls. We admit that the higher education of girls being intended to train them to various professions rather than to the domestic duties of the housewife, any excessive demarcation of higher education according to sex is neither possible nor desirable. But it is perhaps possible to introduce at least certain elements of instruction in domestic subjects so as to bring the education of girls nearer the daily routine of their lives. The proposed course for the Intermediate is to consist of three optional subjects, in addition to English, Physiology, Hygiene, Dietetics, while the course for B. A. is to include three papers, one on Psychology or Ethics, another on Sociology or Political Economy, and another on Biology. We suggest that the question may be considered by the University of Madras also, especially in view of the fact that it has got several girls' colleges affiliated to it.

Educational Reform.

We publish elsewhere a very suggestive and comprehensive memorandum of educational reform, that is being pressed by the 'Headmasters' Association of England on the attention of the Government. The reforms may appear too far-reaching and advanced to those who have been finding it difficult to get very much more minor reforms accomplished in India. But with the progress there has already been in England, with the present awakening of interests in educational matters and with a member of the educational profession itself right at the helm of educational affairs in the country, the programme is probably not difficult of accomplishment. It is rightly demanded that the Minister of Education should be placed on a level, in position and salary, with the principal officers of the State. It is interesting to see that the Association complains of the local bodies, that they lack acquaintance and sympathy with the need for educational progress—a defect so glaringly noticed in almost every Municipality and District Board in our country. In the interests of the efficiency and progress of Secondary as well as University education, it is suggested that the schools and Universities must be brought into closer relationship, by representation of the University authorities in the management of schools and by keeping heads of schools in touch with Universities. Adequate safe-guards for the maintenance of decent scales of salaries in schools; special attention to children

under school-age; the institution of a very much larger number of scholarships to enable poor students to proceed to higher education; a closer dependence between instruction in technical schools and colleges and the great industries of the land—these are some of the other reforms urged. The suggestions made with regard to inspection and examination of schools have got a bearing on Indian educational conditions also and deserve being embodied in any demands urged by Indian organizations of teachers. It will be conceded on all hands that there should be an adequate representation of active teachers on examining bodies; that the syllabus of the school should be accepted as the basis of examinations and that for the award of certificates the school's estimate of the work of individual pupils should be taken into account.

We find that our dissatisfaction with regard to the composition of the Calcutta University Commission is shared by the *Modern*

Review of Calcutta, whose opinion on educational matters is entitled to special consideration in view of the long educational experience of its editor. "Of the seven members of the Calcutta University Commission five are Europeans and two Indians. It is ever thus. Our sons and daughters are to be educated but the decision as to aims, ideals, methods and means must rest with men other than

and was particularly an admirer of Michael Angelo. He was the inventor of that soft, charming manner and characteristic of the English school. Sir Thomas Lawrence was the most successful portrait-painter and a true artist. Turner marks the transition from the old to the modern school. Turner and Blake mark the beginning of 19th Century Art, of a century in which painters and painter-poets have been numerous. Blake was "one of the most remarkable of the men who participated in the Romantic Revival of England."¹ Turner's idealism in Art was the precursor of the Pre-Raphaelite movement, the idealistic school of English Art. Ford Madox Brown was "the grand-father of the Pre-Raphaelite movement."

The above short sketch of the history of the Art of Painting in England before Rossetti, Hunt and Millais started a new movement in English Art, shows that the seeds of the new movement had been sown in the 18th century, even as the seeds of the Neo-Romantic revival in poetry had been sown in the poets of the end of the 18th century.

Nature, Truth and Beauty are in short the ideals aimed at in modern Art—both in Painting and in Poetry. All these elements had been in one way or another emphasised even in the 18th century poets and artists. What was initiated then was organised as a movement by Rossetti and his co-workers.

It looks as though Rossetti was destined to be pre-eminently a painter, though Rossetti now and then rightly thought that his verse was superior to his painting. His poetry is characterised by truth, naturalness and music of a high order. His painting is characterised by truth, naturalness and beauty in an eminent degree. Though Rossetti had displayed a power in painting even from his earliest years, his actual career as an artist may be said "to have commenced with the exhibition of 'The Girlhood of Mary

¹ "Painter-Poets"—Kineton Parkes.

Virgin" in 1849. But before this date, however, he had made some good mark by his lithographing work in 1845, by the commencement of an oil-picture named "Retro Me Sathana!" for which he has left a sonnet, by a portrait study of himself in 1847, and by five pencil drawings for "Verses by Christina Rossetti—1847," and by two drawings of "Gretchen" and "Genevieve" in 1848, and a design from Keats, "La Belle Dame Sans Merci." It was the exhibition of "Lorenzo and Isabella" by Millais, "Rienzi swearing revenge over his brother's corpse" by Hunt and "The Girlhood of Mary Virgin" by Rossetti that gave the signal for the starting of the new movement in Art.

"The Girlhood of Mary Virgin" is an admirable example of his early Art. In the sonnet that Rossetti has written for this picture, the qualities of the "Blessed Mary, pre-elect God's Virgin are exquisitely expressed.

"Unto God's will she brought devout respect,
 Profound simplicity of intellect,
 And supreme patience. From her mother's knee
 Faithful and hopeful; wise in charity;
 Strong in grave peace; in pity circumspect."

The Virgin engaged in embroidery work beside her mother is seen gazing at a little angel standing beside a tall white lily; St. Joachim is tending a vine outside, the young tendrils of which are symbolically trained to form a cross. Strips of palm and seven-thorned briar lie on the floor, and under the lily six large books bearing the names of the six cardinal virtues. The leading conception of the picture is

"She soon shall have achieved
 Her perfect purity, yea God the Lord
 Shall soon vouchsafe His son to be her son."

The "Athenæum" characterised this picture as "full of allegory" with "much of that sacred mysticism inseparable from the works of the early masters." The critical world spoke very highly of this first great effort of Rossetti and expressed high hopes of his future. But envy coupled with a misunderstanding of the P. R. B.

initials, drove the critics to the opposite pole, when Rossetti's second great picture, a pre-eminently religious picture "*Ecce Ancilla Domini*" was placed before the public in the very next year. The "Athenæum" now characterised this picture, in some respects greater than the previous year's picture as "an example of the perversion of talent" and stigmatised Rossetti's school as "slavish imitators of artistic inefficiency."

In this picture, which for over three years remained unsold and was a "Blessed white sore" and a "blessed white daub" to the artist, and which is now valued as one of the greatest pictures of Rossetti, the embroidering of the emblematic lily in the first picture is completed, and the fully embroidered cloth is introduced as a somewhat prominent accessory. The angel is here presenting a lily, emblem of purity, to the Virgin who is seated half rising on her bed. This incident connects this picture with the previous one. The Virgin is represented in all perfect purity,

"All Loveliness new born
 Took on her bosom its repose."

Rossetti designed to paint a companion picture to this, entitled "The Death of the Virgin," but he never began the same. "My religious subjects," says Rossetti, "have been entirely independent in treatment of any other corresponding representation, and indeed altogether original in the inventions."

"The Laboratory," Rossetti's first water-colour, representing the scene conceived by Browning in his poem of the same name, of a lady leaning forward on the table of an alchemist whom she asks

"In this Devil's smithy
 Which is the poison to poison her, prithee?"
 and offering to give all her jewels in return for poison which would kill her rival, consoling him

¹ O. G. Rossetti. "Feast of the Annunciation."
 Fam. Let. Vol. II. p. 98.

"Nay, be not morose;
 It kills her, and this prevents seeing it close;
 The delicate droplet, my whole fortune's fee!"
 a scene more horrible than that in which Lady Macbeth chides her husband and tells him

"But you must not wear a heart so white,
 A little water clears us of this deed,"
 was produced by Rossetti in 1849, the same year in which he produced also a design of "The First Anniversary of the Death of Beatrice," different from the water-colour of 1846-47.

About this time he began his representation of "Hist, said Kate the Queen" and a drawing of "Il Saluto di Beatrice" for the beautiful diptych of the "*Salutation of Beatrice*," the left compartment of which represents the "Salutation on Earth" in the streets of Florence, an incident described in Dante's *Vita Nuova*, and the right representing the "Salutation in Eden," from the *Divina Commedia* and illustrating the lines in the *Purgatorio* beginning

"Guardami ben, ben son, ben son, Beatrice."

Rossavestita (1850) or Red-robed, represents a small upright figure of a woman in red, Venetian costume.

Beatrice meeting Dante at a Marriage Feast, denies him her *Salutation* was painted in water-colour in 1851, the incident being taken from Dante's *Vita Nuova*. It represents a very dramatic incident. When Beatrice and other ladies were assembled at the first meal served in a Bride and Bridegroom's house, Dante, who was led there by a friend, desecrating Beatrice was so far moved and transfigured that all the ladies, including Beatrice jeered at him, and Dante left the place almost at his last gasp. This painting is specially noteworthy for the natural colour of the foliage displayed against the sky—a bright light green bordering upon bright light blue colour—being used in it, a combination which Ruskin highly valued and in keeping with the Pre-Raphaelite principle of Art.

The Return of Tibullus to Delia was painted in water-colour at this time, of which the principle

version belongs to 1866-7. This is one of Rossetti's best considered and most energetic designs.

Hesterna Rosa, founded on Elene's song in Sir Henry Taylor's "Philip van Artevelde,"

"Quoth tongue of neither maid nor wife,
To heart of neither wife nor maid,
'Lead we not here a merry life
Betwixt the shine and shade?'
Quoth heart of neither maid nor wife
To tongue of neither wife nor maid
'Thou wast set; but I am sore with strife,
And feel like flowers that fade.'"

represents a tent or cabin, wherein, after a night's revelry, at the hour of early dawn, two men are playing dice, with their mistresses, vine-garlanded, close by, one singing, with her arms round her lover's neck, the other, the "Hesterna Rosa" in a sadder mood hides her face in her hands. A child is playing on a lute, and an ape is scratching himself in a corner.¹

This picture represents one of the few modern subjects that Rossetti dealt with. It is indeed unfortunate that the few modern subjects which he has painted are not very happy in their conception. In "Hesterna Rosa," revelry is the central conception. In "Found," the faithless love and the immoral life of a woman are pictured. In "Washing Hands," an unpleasant love affair is depicted. Somehow it happens that Rossetti has left a striking contrast between his pictures bearing on religious subjects as well as on mediæval themes, and those which represent the modern subjects. An exception to this, is, however, seen in his "Dr. Johnson with the would-be Methodists at the mitre."

Fazio's Mistress painted in water-colour in 1852, and afterwards repainted in oil in 1873 as "Aurelia" represents a subject of Rossetti's own invention, a lady, whose portrait was being painted by her lover, falling back in a deathly swoon.

Giotto painting the Portrait of Dante, a pen and

¹ From "Easter Art Annual"—1902.

ink design of which had been made in 1849, was painted in water-colour in 1852. It represents a subject suggested by Dante's portrait by Giotto and is full of thought and suggestion.

Found was begun in 1853, though the subject had been conceived and designed a year or so earlier, was worked upon from time to time, especially once in 1862-3, and again in 1880-1, but remains still uncompleted. The back-ground of this picture was first painted, in a thoroughly Pre-Raphaelite fashion, the calf and the cart, and the brick wall being drawn from actual objects, the latter, it is worth noting, at early dawn, the time conceived in the picture. The picture represents a dissolute woman being found after a night's ill-spending, crouching on the ground at early dawn, in a London street abutting on one of the bridges, by a young drover proceeding to the market with a calf on a cart and recognised by him as his former sweetheart, who now turns away from him and cries in her locked heart,

"Leave me—I do not know you—go away!"

The sonnet which Rossetti has left for this picture, beginning,

"There is a budding morrow in midnight,
So sang our Keats, our English nightingale"

and representing the man as "gasping" and the woman as "quailing" is very characteristic of Rossetti's imagination. The subject of this picture is Rossetti's own invention and not borrowed from Scott's poem of "Rosabell" or even inspired by it.

It was in 1853 that Rossetti made that playful sketch of *Rossetti sitting for His Portrait to Miss Siddal*.

Michael Scott's Wooing is the subject of two designs, one of 1853 and the other with no date marked. The idea in these is that the wizard Michael Scott, to please and fascinate a lady whom he was wooing, gets up a magical pageant of Love, Death and various other figures. A third design of the same subject was made, but differing in details. Rossetti has left six lines for this, in which two lines may be noted:

"Sweet the flower of his first youth
When Michael Scott was young."

Two pen and ink sketches of *Alfred Tennyson Reading Maud* were made in 1855. These were taken during the reading of the poem at the house of Robert Browning, especially as he read out the line,

"I hate the dreadful hollow behind the little wood."

The Passover in the Holy Family was begun in the same year. The sonnet written for this drawing very aptly represents the scene

"Here meet the prefiguring day
And Day prefigured."

"In the house-porch, Christ holds a bowl of blood from which Zacharias is sprinkling the posts and lintel. Joseph has brought the lamb and Elizabeth lights the pyre. The shoes which John fastens and the bitter herbs which Mary is gathering form part of the ritual."

The water-colour of "*Dante's Dream at the time of the Death of Beatrice*" painted at this date, possesses peculiar interest as being the first embodiment of the largest oil-picture on the subject, painted in 1870 and considered to be one of the greatest pictures of the world.

Hamlet and Ophelia was designed in pen and ink in 1855. This design is different from the water-colour of 1866. The design represents the scene in Act III of the play, where Ophelia returns to the prince his letters and "rich gifts" which now waxed poor, "their perfume lost" and the attraction lessened, which once, "with them, words of so sweet breath composed," made the things more rich. "It is simple and dignified, and does not possess much of the theatrical element natural to the dramatic representation. In this design, Hamlet is "ramping about" wildly and looking pitifully at Ophelia, who is sitting gravely and turning away from Hamlet. In the water-colour of the later date, both are standing, he holding her right-hand in both his, she with averted face and

the casket of letters in front of her. The latter is more dramatic and effective than the former.¹

In 1855, Rossetti executed some works on wood as illustrations to Allingham's Poems.

Wedding of St. George and *The Gate of Memory* belong to 1856-7. The former is conspicuously chivalric in conception and one of the grandest things, like a golden dim dream.

Fra Pace, a delightful little picture in water-colour, represents a monk engaged long in illuminating a manuscript, so long that a cat has coiled up to sleep in the folds of his robe, whom a juvenile acolyte tickles with a straw. The monk, clearly a Pre-Raphaelite, is copying with great minuteness a dead mouse which lies on the desk in front of him.²

The Blue Closet and *the Bower Garden* are also works of this date. The former represents "some people playing music."

The years 1856-7 are particularly noted for several Arthurian productions of Rossetti—a pen and ink drawing of *Morte d'Arthur*, a water-colour "*The Tane of Seven Towers*," a fresco "*Lancelot at the shrine of the Sanct Grael*," the water-colours "*Sir Galahad*," "*Sanct Grael*," and "*Meeting of Sir Tristram and Yseult*."

Rossetti's design of "*St. Luke, the Painter*" was made at this date. Rossetti's sonnet for this design is a very excellent one. *St. Luke was the Evangelist*,

"Who first taught Art to fold her hands and pray."

At this date, Rossetti made five Tennyson engravings on wood.

Mary Magdalen at the Door of Simon the Pharisee was the most important Art production of Rossetti during these years. This was the third great religious picture of Rossetti, the *Passover* picture remaining only as a drawing. In this, Magdalen, about to enter into the house of Simon, beholds the head of Christ through the open window, and tearing from her brow the garland that adorned

¹ From "The Easter Art Annual,"—1902.

² Easter Art Annual—1902.

it, not attentive to the dissuasions of all around her, not noticing the smiles of the servants before her, proceeds forward as if to meet the Bridegroom for whom she has been eagerly looking. It seemed as though

"She wept for the great transgression,
The sin of other time,
Trembling betwixt hope and fear,
She sought the king of Heaven,
Forsook the evil of her ways,
Loved much and was forgiven."¹

Jesus Christ taught his disciples to be ever ready to meet the Bridegroom, for no one knew when he would come. Mary Magdalen was suddenly called now by the Bridegroom and she without any delay, throwing off everything that was worldly and that could be called hers, proceeded onward, saying,

"He needs me, calls me, loves me, let me go."

The sonnet for this picture written by the artist is well worth reading for the emotional simplicity that pervades the artistic presentation of the incident.

Mary in the House of John (1858) is one of Rossetti's most grave and complete inventions and one of his best paintings. It represents John engaged in writing his Gospel and Mary pouring oil into the lamp and setting it right for him. His fishing net is hanging up in the room.

A Christmas Carol, also on a religious subject, was the picture that inspired Swinburne's poem of the same title, wherein we find the best description of this charming picture.

"Three damsels in the Queen's chamber,
The Queen's mouth is most fair;
She spake a word of God's mother
As the combs went in her hair."

In the picture, the queen is seated playing on a clavichord, while two attendant ladies comb her vivid copper-red hair. She is engaged in singing Christmas praise to God:

"Till I my voice unite
And sing my "glory, glory"
With Angels clad in white;

¹ Christina Rossetti, "Poems."

All 'glory, glory' given to thee
Through all the heavenly height."²

In 1859, Rossetti made a water-colour study of "The Head of Christ," for a projected large oil painting of a companion picture to "Mary Magdalen" picture. But this project was ultimately abandoned.

Rossetti painted a portrait of *Robert Browning* in water-colour in 1859. It will be remembered that this poet held a complete sway over Rossetti for a considerable time.

Bocca Baciata (1859), so named from the words occurring in Boccaccio, meaning "kissed mouth" or "a mouth that has been kissed," represents a woman, with a number of marigolds. This woman has been identified to be a Mrs. H—, who, by her bold act of throwing some shells at Rossetti, while she was cracking nuts with her teeth, has thus been immortalised by the artist.

How They Met Themselves (1860). It is strange that, just after Rossetti's marriage with Miss Siddal, he should have drawn from her for this picture, which in its conception and execution is ominous of death. It is particularly strange that this was done by one who had firm faith in such phenomena, and over whose mind "the supernatural exercised a strong fascination," "though he never abandoned himself to any irrational extent to communion with "bogeys," for whom, however, he entertained a genuine regard and affection."³ In this ghastly picture, two lovers meet with their own doubles and the lady is thrown back, while the lover makes a vain effort to draw his sword.

Dr. Johnson and the Methodist Ladies at the Mitre (1860) bears on the incident related by Maxwell, who in the picture figures as Boswell, in order to show the inseparable companionship between the idolised doctor and the worshipping biographer, of two ladies having once been asked by the doctor to meet him at the Mitre and dine with

² Christina Rossetti, "A Christmas Carol."

³ Easter Art Annual, 1902.

him, so that the "pretty fools" might learn about Methodism from the Doctor before they became Methodists. In this picture, Dr. Johnson is seating one of the young women on his knee, while the other is seated before him on the ether side of the table. The discussion evidently has taken a long time, since the waiter is seen giving the signal for putting out the lantern.

Danti's Amor (1860), a quaint design, intended for the centre piece of a replica of the two "Salutations of Beatrice," which Rossetti executed for a cabinet for the Morris firm, represents the last line of the "Divina Commedia,"

"L'Amor che muova il sole e l'altre stelle."

This line is inscribed in the design diagonally crossing the quaint figure in the middle, on whose chest we find the date 1290. At the top in the right-hand corner we see a head looking down, where we find these words

"U est per omnia sæcula benedicta."

At the bottom in the left-hand corner we see another head looking up, where we find these words,

"Quella Beata Beatrice ehe mira
Continuamente nella faccia di colui."

In 1860 Rossetti drew a portrait of *Mr. Swinburne*, and also one of *Mrs. D. G. Rossetti*, her head lying back in languor or convalescence on a pillow.

Before the Battle (1860) representing a castleful of ladies embroidering banners, which are fastened to the spears by the Lady of the Castle, is "a perfect feast of mediæval costume and sentiment."

In 1861 Rossetti painted two portraits of his wife, one in oil, the other in water-colour, and he made also a pencil drawing of Lizzie standing at an easel, which is a thorough representation of the tall lady.

Cassandra (1861, retouched 1869) represents an incident "just before Hector's last battle." Cassandra seeing that her warning has been in vain, now throws herself against a pillar and rends her clothes in despair. Hector is rushing to the battlefield. The army is marching. Andromache is standing with the child and the nurse

² Easter Art Annual, 1902.

is holding a cradle. Helen is arming Paris. She looks depressed and Paris is patting her on the back, to soothe her. Priam and Hecuba are witnessing everything, the latter stopping her ears in horror. One brother is imploring Cassandra to desist from her fear-inspiring cries; and her words—

"beat heavily

Like crows above the creast and at his ear
Ring hollow in the shield that shall not save."³

The Triptych for Llandaff Cathedral (1861) is in fact a true representation of Rossetti's doctrine of the equality of all men in the eyes of God. In the central compartment is painted the Adoration of the Saviour, revealed in the flesh, by a king and a shepherd, both of whom are led forward by one and the same angel holding a band of each of them. On the left side, we find David in early youth as a shepherd, and on the right, the same David, in mature manhood as a king. This is one of the most beautiful works of Rossetti.

The Borgia Family. One water-colour painting of this was made in 1861 and the other in 1868. In one Lucrezia Borgia is seated with her brother Cesare and Pope Alexander VI listening to music and watching two children dancing. In the other she is washing her hands after poisoning her husband, and the Pope is walking him along the room, as if "to settle the poison well into his system" as Rossetti put it. The picture is an unhappy one in the latter case and not a very artistic one in the former. If we would for a moment compare the former version of this picture with "The Baillie Family" of Gainsborough, we shall be convinced that Rossetti's picture is sterile to the utmost. The natural beauty and the lovely occupation, and the fine inner thread of affection and love in a simple family, prominent in Gainsborough's picture, are completely missing in Rossetti's.

It was at this time that Rossetti executed seven cartoons for painted glass on "The Parable of the Vineyard."

Paolo and Francesca (1862). This triptych is "the most beautiful of all Rossetti's early

³ Rossetti's sonnet for the picture.

Dantesque water-colours."¹ The triptych illustrates the lines in the fifth canto of the "Inferno," which are rendered thus by Rossetti:—

"One day we read for pastime and sweet cheer,
Of Lancelot, how he found love tyrannous,
We were alone and without any fear,
Our eyes were drawn together reading thus,
Full oft, and still our cheeks would pale and glow
But one sole point it was that conquered us.
For when we read of that great lover how
He kissed the smile which he had longed to win
Then he whom nought can sever me now,
For ever, kissed my mouth all quivering."

Thus was the incident explained by Francesco to Dante, when he, in the Inferno questioned her for her reaching those regions.

On one side of the triptych we see the kissing, and on the other we find its consequence. They were done to death in the world and now in the Infernal regions, their spirits, "remorseful, sorrowful, yet together are whirled continually onwards as leaves through the driven air."² She seems to be protecting her lover from the flames with her body and her long flowing hair and he seems to be telling her, "I shall save you from all manner of ill adventures and dangers."³ In the central compartment we find Dante and Virgil looking at the pair thus flying amidst flames and exclaiming "O lasso!"

Venus Verticordia (begun in 1863, finished in 1865-6 and retouched in 1877). The sonnet written for this picture explains the representation very well.

"Behold, he is at peace," saith she;

"Alas! the apple for his lips,—the dart
That follows its brief sweetness to his heart,
The wandering of his feet perpetually!"

This picture is nearly the largest and the most elaborate oil-picture that he had ever undertaken and it ranks among his principal productions.

Beata Beatrix (1863) the most touching picture of Rossetti, with the sole exception of "Dante's Dream," represents Beatrice in a trance and was painted in memory of Rossetti's beloved wife who died in 1862. "The picture illustrates the *Vita Nuova* embodying symbolically the death

of Beatrice as treated in that work." She is represented as being in a trance, seated at a balcony, overlooking the city of Florence, which lies desolate, according to Dante's own conception in the work referred to. While so sitting with shut eyes, she is suddenly "rapt from earth to heaven." Dante and Love are gazing ominously at each other, conscious of the event; the bird, a messenger of Death, drops the poppy between her hands. With her eyes closed, Beatrice is conscious of a new world, as the last words of the "*Vita Nuova*" indicate, "That blessed Beatrice who now gazeth continually on His countenance, *qui est per omnia secula benedictus*." ["Who is blessed throughout all ages."]

The picture is perfect in every respect. Human and Divine beauty pervade her expression. The grief in Rossetti's heart, while painting this picture is clearly depicted in it. Rossetti might well have looked at this sad picture and said what Dante said in his "Pitiful Song," thus rendered by Rossetti,

"I talk with no one else,
But only with such hearts as women's are
And I will say—still sobbing as speech fails
That she hath gone to Heaven suddenly,
And has left Love below to mourn with me."
.....calling with a sore lament
On Beatrice, I ask, "can'st thou be dead?"
And calling on her I am comforted."

This memorial to his wife is an exquisite fulfilment of "*Dante Drawing An Angel in Memory of Beatrice*" his earliest Dantesque design in pen and ink, the subject having been taken from a passage in the *Vita Nuova* thus rendered by Rossetti:—"On that day which fulfilled the year since my lady had been made of the citizens of eternal life, when remembering me of her, as I sat alone, I betook myself to draw the resemblance of an angel upon certain tablets. And while I did thus, chancing to turn my head, I perceived that some were standing beside me to whom I should have given courteous welcome, and that they were observing what I did. Also I learned afterwards that they had been there awhile before I perceived them; perceiving whom, I arose for salutation and said "Another was with me."

(To be continued.)

N. K. VENKATESAN

THE EVOLUTION OF HINDU POLITY.

From the Vedic to the Chanakyan Times.

III.

(Continued from page 453.)

Such were the ideals of Hindu polity at the end of the Upanishadic and the beginning of the Sūtraic period, i.e., about B.C. 700. The Sūtras introduced not only a new epoch in Indian social, religious and literary evolution, but on the evolution of the constitution as well. The Sūtras reflect the period when the Brahman was supreme in the land, when every branch of human culture and activity was based on the social and political ideals of which he was the maker and formulator. The caste system became thoroughly established and came to dominate the life of mankind. The family, the society, the State came to be based on it. The law, the morals and the ambitions of men came to be shaped and directed by it. The welfare of the world, in other words, came to be looked upon as dependent on the supremacy of the Brahman, the maintenance of the social order which he defined and perfected, and on the laws regarding the family, marriage, inheritance, social customs, caste duties which he defined. And as this elaborate Brahmanization was possible only with the help of the king, the latter's power was enhanced and magnified, thus contributing to a logical development of absolutism. It was to the interest of the Sūtrakāras, the Brahmanical law-givers, to applaud the monarch as the preserver of the social order of which they were the heads and the authors. "The Brahman," to use the language of Max Duncker*, "it is true, demanded that the king should regulate worship, law and morals according to their views and requirements; they imposed upon him duties in reference to their own order; but on the other hand,

they were much in need of the civic power to help them in carrying through their demands against the other orders. This doctrine of submission to the fortune of birth, of patient obedience, of a quiet and passive life in connection with references to punishments after death and the evils to come, were highly calculated to elevate the power of the kings and lull to sleep energy, independence of feeling and attitude, boldness and enterprise in the castes of the Kshatriyas and Vais'yas. The interest in another world and the occupation with the future must thus have become more prominent than the participation in this world or care for the present. In such circumstances the world was gladly left to those who had once taken in hand the government of it. When the nation had gradually become unnerved by such doctrines and cares, the monarchy had an easy game to play. Its rule might be as capricious as it chose. In weaker nations unaccustomed to action, the need of order and protection is so great that not only acts of violence against individuals but even the oppression felt by the whole is gladly endured for the sake of the security enjoyed in other respects by the entire population."

The development of monarchical absolutism, then, was the most glaring feature in the Sātra period; and Gautama, the earliest of the Sātrakaras whom Buhler attributes to about B.C. 600, distinctly lays down the theory that "all except Brahmins shall worship him who is seated on a higher seat." The theory of divine right, in other words, which was to reach an unlimited development in the later Sātra period was thus first conceived. The king as a divinity came to be invested with a halo. His household was made a pompous and expensive establishment; his retinues were increased. His residence assumed the grandeur of a palace. Already in the Rīg Veda there is mention of thousand-pillared halls and the palace of the king came to be associated with them. Elaborate rules came to be framed for

* See his *History of Antiquity*, p. 199.

¹ *Easter Art Annual*, 1902.

² Watt's description on the tablet for the picture.

³ Malory: *Morte d' Arthur*.

the selection of the site, the location of rooms, the provision of furniture and other details. It had to be built in the heart of a town, for instance. It should have a front hall where ceremonies for the destruction of the king's enemies were constantly performed, and where the domestic priests and astrologers invoked the aid of the gods for the king's health, his prosperity, his victory in battle, his triumph over enemies. Poets and scholars surrounded him and sounded his praises. The pleasures of dice* and the chase, the excitement of athletic contests and tournaments made his court gay, while the intellectual wranglings of scholars gave it a solemn greatness. The establishment of a harem, we may believe, was a feature. In short all those pomps and paraphernalia which we associate with a despotic monarchy came into existence. To consider the king as a divinity in human form, to have in his personality the elements and characteristics of the eight protectors of the world, was an easy development from this. And to justify this the king, on his part, was bound to be holy in his acts and speech; he was further to be well versed in the three Vēdas and logic. He had to subdue the senses and show strict impartiality in his dealings with men. If he was considered to possess divine attributes he should justify the regard with the practice of divine virtues. With a singular knowledge of the human nature Āpastamba

* Āpastambā gives the following regulation regarding dice. "In the midst of the assembly house (the Superintendent of the House) shall raise a play-table and sprinkle it with water, turning his head downwards and place on it a dice in even numbers made of *Vibhitaka* (wood), as many as are wanted." See S. B. E. Vol. II, p. 161. Men of the three castes can play there. The same Sūtrakāra says that assaults of arms, dancing, singing, and like performances could be resorted to only in the houses of the king's servants.

lays down the doctrine that the king "should not live better than his gurus or ministers," superior as they are to him in spirituality and in wisdom.

Side by side with the formulation of this theory there was introduced a sort of code for the guidance of the king, defining his duties and responsibilities, his privileges and rights. A scrutiny of the order as well as the enumeration of the royal functions by Gautama is both illuminating and interesting. He assigns the first place* to the protection of all created beings; the second to the infliction of lawful punishments on the guilty (i.e. the administration of justice); the third to the duty of supporting the Śrōtriya, the people who were unable to earn their livelihood by working, who were free from taxes and who needed temporary residence; and lastly the defence of the country. It will be seen from this that the duties of general protection, administration of justice and poor relief are considered to be even more important than the defence of the country,—a phenomenon which is due to the facts that the Aryan conquest and colonisation was now complete, that the kingdoms had become definitely established and defined, and that internal problems and pursuits of peace loomed larger in the eyes of men as the pressing needs of the time than the pursuit of war. Gautama later on dwells in detail on these functions. Under the function of protection he† brings the heavy and responsible task of maintaining the moral and social order of the universe, a task which the king had to share with the Brahman. A king and a Brāhmaṇa versed in the Vēdas, he says,‡ "these two up-

* See *Sacred Books of the East*, Vol. II, pp. 225-6.

† Āpastambha says that the king "shall appoint men of the three castes, pure and truthful, over villages and towns, for the protection of the people."

‡ S.B.E. II, pp. 211-2.

hold the moral order of the world. On them depends the existence of the fourfold human race, of internally conscious beings, of those who move on feet and on wings and of those which creep; as well as the protection of offspring, the prevention of confusion of castes, and the sacred law." The transgression of the sacred law led to punishment and the second function of royalty was therefore the maintenance of security by the administration of the Daṇḍa. The Daṇḍa had, as I have already said, a twofold aspect, the police and the justice. It was in this period that the theory of State responsibility for inefficiency of police was laid down, so that a person who lost his property in consequence of an inefficient or indifferent police, had the right to be compensated from the State coffers.* With regard to justice Gautama describes an elaborate innovation both in the machinery and the method of its administration. Concerning the machinery he lays down that the king cannot act on his own initiative. He is bound to administer justice and give legal decision after consultation with learned Brahmanas. He might appoint a Brahman† as judge or might himself be the judge but with Brahman assessors. In doubtful cases he was bound to consult a committee of men versed in law. Such *Parishads* or committees were, according to Gautama, to consist of "ten men,—four versed in the Vēdas, three representing the three orders and three who know the three institutes of law." In case of their failure the king should depend upon the decision of a Śrōtriya who was well versed in the Vēdas and the institutes. With regard to the method of administration the

* See S.B.E. II, p. 229, verse 47.

† Āpastamba is more vague. "Men of learning and pure descent, who are aged, clever in reasoning, and careful in fulfilling their duties, shall be the judges in law suits."

bases of justice were the Vēdas, the sacred institutes, the Vēdāṅgas and the 'Purāṇas.' The laws of particular countries, castes and families were authorities in case they did not clash with the sacred records. In regard to cultivators and traders, herdsmen and money-lenders, artisans and similar classes, the rules framed by themselves were authoritative, and should be the bases of judicial decisions. Witnesses play a large part in the Sūtraic period and elaborate rules regarding them are given. There was no caste restriction in regard to them and they were deterred from falsehood and other questionable subterfuges by drastic punitive regulations in this world and threats of still more drastic treatment in hell. The judges were guided not only by the statements of witnesses but by inferences, ordeals, etc. "In doubtful cases," says Āpastamba, "they shall give their decisions (after having ascertained the truth) by inferences, ordeals and the like (means)." More than once the Sūtrakāra insists that no man shall be punished on suspicion. In every case it should be only after investigation either by questions to witnesses or, in case they were not available, by ordeals. The punishment of criminals was most defective, based as it was on caste privileges and immunities, on caste disabilities* and burdens. A Brahman was treated more leniently for the same crime, a Kshatriya a little more severely, a Vaisya still more severely and a Śūdra in a positively Draconian fashion. The king shall send any transgressor of the sacred law, says Āpastamba, "to his domestic priest, who should be learned in the law and the science of governing. He shall order them to perform the penances if they are Brahmanas. He shall reduce them to reason by forcible means except corporal punishment and servitude. In the cases of men of other castes the king, after having examined their actions,

* See S. B. E. Vol. II, p. 237 and for details. *Ibid*, Vol. XIV, pp. 203-4.

may punish them even by death." The nature of punishment thus depended not only on the nature of the crime but on the status of men; and the same defect was seen in the cases which concerned intercaste disputes. Another defect was that, on account of the sacerdotal conception of law, "all distinctions of criminal and civil process" disappeared and it became "a matter of indifference whether an offence has taken place from a doubtful claim, error carelessness or evil intention." The system of *Vaira* or *Vairāyatana* continued. According to Āpastamba and Bāudhāyana the compensation for the death of a Kṣātrīya is 1000 cows: for that of a Vaiśya 100 cows; and for that of a Sūdra 10 cows. "In every one of these cases," says Āpastamba, "one bull must be given in excess for the sake of expiation*." "And if women of the three castes mentioned have been slain the same compensation must be paid."† Over and above the system of *Vairāyatana* there was prevalent, by the Sūtraic age, an elaborate penal code which prescribed punishments for every offence. Incest, for instance, was punished with death by embracing a heated metal image; drink by compulsory drinking of liquor hot enough to be fatal. Theft was punished with death by a club with the king's own hand, and adultery by mutilation. Unlawful intimacy with a marriageable girl was chastised with banishment and confiscation and the wronged woman had the right to receive State support. Abuse by a Sūdra or repetition of the Vēdas by him entailed the cutting of his tongue and his assumption of an equal position was punished with flogging. Similar punishments

* The compilers of the *Vedic Index* believe that this was to be given to the king apparently "for his intervention to induce the injured relatives to abandon the demand for the life of the offender." See Vol. II, p. 331.

† See S. B. E. Vol. II, pp. 78-9. Messrs. Keith and Macdonell say that Gautama places women in this case in the same position as Sūdras.

are prescribed for other offences, and the judges had no difficulty of uncertainty in the matter. Similarly in civil cases* the laws regarding agriculture and pasture, property, usury, inheritance and partition were codified and perfected. The judicial administration was thus completely revolutionised, and the effects are seen and felt even to-day.

With the definition of the king's functions and responsibilities there was also the definition of his financial resources or *Sulka* as they were collectively called. Gautama says that the king was entitled to collect one-tenth, one-eighth or one-sixth of the produce from his subjects; one-fiftieth (i.e. 2%) of the stock on cattle and gold; one-twentieth (5%) from the seller of merchandise; and one-sixth of the roots, fruits, flowers, herbs, honey, meat, grass, firewood, etc. He was further entitled to the free service of the artisans, owners of ships and carts for one day in the year, he being in turn bound to feed them while in his service. Above all, he had the privilege of purveyance by which he could compel merchants to sell one article a month for prices less than the prices which prevailed in the market. Lastly, he was the owner of a treasure-trove except when it was discovered by a Brahman, and the owner of the property of a person who had disappeared for more than a year. It may be added that, according to Bāudhāyana the payment of the sixth part devolved on all sections of the people, secular or spiritual. He further fixes a duty of 10 *paras* per 100 on goods imported by sea. Āpastambha enumerates the classes of people who were exempted from the *Sulka*. These are the Brahmans, women of all classes and communities, male children before age, those who live with a teacher in order to study, ascetics

* See Dutt's *Civilization*, Bk. III, Chap. 4 for an excellent summary of these.

† In Rig Vedic times the term *Sulka* meant price. In the Adharva Vēda and later literature it came to mean tax.

who are intent on fulfilling the sacred law, Sūdras who live by washing their feet; blind, deaf, dumb and diseased persons; and those to whom the acquisition of property is forbidden (e.g. Sanyāsins). The principles on which the exemption is made are, except in one or two cases, excellent; and the historian cannot but admire the liberal spirit in which the Sūtrakāra views the question. As regards expenditure, we can readily suppose that the king had, besides maintaining the civil and military service, the construction of public works (civil and military), the maintenance of his extensive household and gorgeous court with its pomp and pageantry, its festivals and tournaments, a heavy responsibility in encouraging learning, in rewarding the learned and in helping the needy. Āpastamba, for instance, plainly says that, besides making special provision for S'ūtrīyas, Brahmans, etc., the king should endeavour to alleviate general misery. "No one should suffer hunger, sickness, cold or heat, be it through want or intentionally."

Max Duncker points out that the Buddhist Sūtras corroborate the evidences of the Brahmanical Sūtras in every respect. He points out how in these heretical manuals, "the law-books are generally recognized and carried out"; how the growing exclusiveness of castes, as seen in the triumph of the marriage law of absolute prohibition over the more ancient and liberal view of the husband's choice of his wife's caste, the division of the same castemen into sub-castes, the observance of stricter laws regarding food, the growing belief of the lower castes in their own positions and vocations, and the social domination of the orthodox Brahmans whether as anchorites in forests or mendicants or astrologers or court advisers, inevitably led to the perfection of the divine theory. The account which Duncker gives of the life of the Rāja in the 6th century, as traced by the scholarly pen of the famous French antiquarian, Barnouf, proves the truth of this

dictum. The kings on the banks of the Gauges led a life of pomp and luxury. "Their palaces are spacious, provided with gardens and terraces for promenading. Besides the women and servants, the body-guard and executioners clothed in blue are domiciled in the royal citadel. The princes eat off silver and gold, and are clothed in silk of Varānas'ī. Friendly princes make handsome presents to each other, e.g., suits of armour adorned with precious stones. Their edicts and commands are composed in writing and stamped with the seal of ivory. The labours of government are relieved by the pleasures of the chase. In sickness the princes are served with the most selected remedies. When Bimbisāra's son and successor fell down one day in a swoon, he was placed in six tubs full of fresh butter and afterwards in a seventh filled with the most costly sandalwood. The harem of the king was numerous, and the women had great influence..... Any one who ventured to cast a look upon one of the wives of the king forfeited his life. When one of the wives of Prasānagit, king of the Kosalas, was walking in the evening on the terrace of the palace she saw the handsome brother of the king, and threw him a bouquet; when this came to the ears of Prasānagit, he caused the feet and hands of his brother to be cut off. The same cruel and barbarous character marks all the punishments inflicted by the king. On the order of a king whose mildness and justice are commended, all the inhabitants of the city are said to have been put to death on account of an error committed by one of them. If any one had to make a communication to the king or lay any matter before him, he first besought that he might not be punished for his words. No one approached the king without a present, least of all merchants. Happy events were announced by princes to their cities by the sound of bells. Stones, gravel and dirt were then removed from the streets, which were sprinkled with sandal water and strewed with flowers and garlands,

and silken stuffs were hung along them. At certain distances jars filled with frankincense were placed; and if a guest of distinction was to be received the ways were cleansed for a considerable space before the gates, smoothed and perfumed, and furnished with standards, parasols,

and resting-places for followers." (Max Duncker, based on Burnouf, p. 323).

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The contribution of secondary education to national life ought therefore to be (a) the production in those committed to our care of a good will, a will that is strongly and constantly set in certain definite directions and (b) the imparting to them of such knowledge as will benefit them, their family and their nation. It is for us to hand over to the national life of India year by year a band of young men, each possessing a developed will and a well-stored mind. In part we are doing so now. I cannot agree with those who say that our High Schools are a failure, giving our boys a mere veneer of English knowledge and nothing more. I believe much has been achieved but I am confident much more may be and ought to be attempted and would be attempted if we fixed our ideals higher, believed in our boys more completely and lived in harmony with our own ideals.

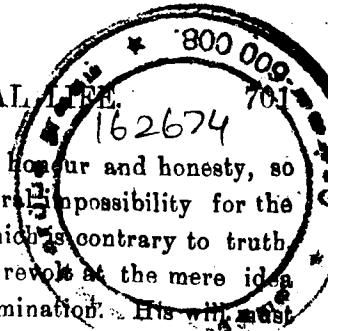
We therefore ask ourselves what this will is which we are striving to create in our pupils. It is first, I think, a will that is absolutely

* A paper read by the Rev. D. G. M. Leith, M.A., at the Headmasters' Conference at Madras.

devoted to truth and honour and honesty, so that it becomes a moral impossibility for the boy to desire that which is contrary to truth. His whole soul must revolt at the mere idea of copying at an examination. His will must rebel at the slightest suggestion of taking a bribe either for the doing or for the omission of a duty. The news that once one of the old boys of our school had been detected cheating at a public examination came to me like the blow of an assassin. I felt that the school had failed in that boy at least to produce the will for honesty and truth. It had failed to make to the nation that contribution which the nation had a right to expect.

I am positive that such a will cannot be produced by a school where there is suspicion that a teacher takes school fees from a boy or money for a book, spends the money for his own purposes and is then unable to buy the book or pay the fee until the following month when his salary has been received. If in any school there is the slightest suspicion of partiality or dishonesty in the awarding of marks or the making of promotions, the will for truth, the will that revolts from all prejudice can hardly be produced. The environment makes it almost impossible.

This good will is also the will to obedience and instant obedience. A country whose citizens have not learned the art of obedience is a land at war with itself. Chaos and defeat are certain. We plead for instant obedience at school—not that we wish boys to become machines. But we believe that obedience is the expression of a certain accuracy of mind and of a well-ordered life. It is essential for him, who in later life is to be in a position of command and leadership. Yet I am not sure that we have reached such a position in our



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schools. The Drill Master calls "Halt." But various feet take one, two or three steps forward after the order has been given. The teacher proclaims silence in the class-room. Noise and talking continue and then the sound of a vigorous beating of the table with a pointer is heard. Instant obedience has not been achieved. The meaning and grandeur of the word "ought" and "must" have not been seen and felt by the boys. The supremacy of the outward authority, when endorsed by the inward authority of the conscience has not become the controlling force of life. And so it is that parents come to us from time to time, complaining and lamenting that they cannot control their boys. It is often the parent's fault. But we ought to be able to help them by means of the will for obedience that we impress upon our pupils.

The third characteristic of this good will is a will to concentrate upon work—a will to keep at tasks though many voices call us from them. The nation's life, I am sure, makes this demand upon us. Here we have a hard battle to fight. Sentiment and tradition seem to work mightily against us. Parents and boys so often seem to imagine that a day's leave to go to town is just as useful as a day at school. I am well persuaded that if we could arrange for all preparation of lessons to be done in school either morning or evening so that practically no study was done at home, we should be able to secure a much greater mental concentration than for the most part now exists. That would be an important contribution to the national life of India.

Yet further this good will must be strong in initiative. The true citizen must escape from the tyranny of custom, intellectual, social and moral. This is essential for the

maintenance of that freshness of mind, that ability to see life from a new point of view so requisite for national progress. I confess that only in part have we here succeeded. I do want the broader life that initiative gives. Boys must be obedient but they must be free and quick to form new standards of judgment from all they read and see so as to develop that initiative which is the first step in self-realisation leading in turn to national and world realisation.

Yet fifth I mention the will to accuracy. This, of fundamental importance to national life, we are in part achieving and in part failing to achieve. And it should be remembered that punctuality is but a branch of accuracy revealing the accurate mind and the ordered life that are such great assets to the growth of a nation. Punctuality within the school is not always easy to secure. Even among ourselves there are possibly some of whom the boys say: "He always comes to class late. We who are headmasters have ever an excuse ready for ourselves. 'Some duty came to me and I had to do it. So I was late for my class.'" Such is our excuse. The real fact is that in most cases our lateness is due to our lack of forethought and careful planning.

Yet further it cannot be doubted that India is travelling along the high road to democracy. The secondary school has its contribution to make to the development of self-governing capacity in pupils. Every school has its monitors. Too much however they are chalk and duster carriers, our peons rather than our colleagues. Responsibility for order and discipline in increasing degree should be placed upon the monitor. He will rise to it, but he must not be allowed to become a bully. Experiments have recently

been made on the formation of a school court, in which all the members are pupils elected from amongst the members of the Fifth and Sixth Forms. Minor delinquencies are brought before the court and thus far the experiment seems to be successful in helping in the development of the communal sense.

A similar lesson is given to the boys in the relationship between the headmaster and the other teachers in the school. (Please do not call the other teachers "my assistants"—they are not, they are our fellow-labourers in the same cause). A school is a community. Its form of government should be a constitutional monarchy, free play being given for the self-realisation of each member of the staff and as far as may be for each boy in the school. It is astonishing and gratifying to see the emphasis that is being laid in Indian educational thought to-day on self-realisation as a dominating need of an educational institution. Writing of Rabindranath Tagore's School at Bolpur a visitor says:—"There I know was an atmosphere in which self-realisation was possible." Is that true of our schools? Or are we fettered by custom, by tradition, by lifeless routine or worst of all by an utter disbelief in the real educational value of the work we are doing and the subjects we are teaching our boys?

I have stated then as our first contribution to national life the development of the wills of our boys towards that which is of highest value for the life of the country. This we may call the training in social membership. The actual knowledge is in a sense less important. During the last fortnight the columns of the *Hindu* have published many letters suggesting various subjects for our

consideration. They have mostly dealt with courses of study, specialisation, syllabuses *et hoc genus omne*. Far be it from me to minimise the importance of these things but they are not fundamental.

Knowledge however we must impart and I would put first a careful and accurate knowledge of the mother-tongue. This is essential to link the boy with past traditions of his country, to enable him to understand his people and to make it possible for him to convey to his people the knowledge and the point of view that his future education will give.

Second, there must be an accurate though not a tricky knowledge of English. That is required as a means of higher knowledge, as a means of union with the rest of the nation and as a means of access to the markets of the world. This last I regard as very vital for the process by which millions of the people of India who are now in a state of miserable poverty may be lifted to a level of life in which self-realisation is more possible than it is at present.

Third, I put an accurate knowledge of Elementary Mathematics with special emphasis on Arithmetic and less emphasis on Geometry and Algebra. I cannot for example understand why the S. S. L. C. Board prescribes for us a large section of Geometry and Algebra and lightens the Mathematics course by omitting stocks and shares which I regard as of paramount importance to young men in a country that is struggling to embark upon a commercial and industrial career.

Fourth, I suggest a thorough but elementary knowledge of Nature through Science and Geography.

Fifth, I add an accurate grasp of the History of India and of the Empire to which we

belong not merely to develop patriotism, but to gain knowledge founded on fact of human nature, the nature with which we must deal as we mingle with men.

Sixth, some form of hand training either in Practical Science, in Drawing or Manual or Agricultural work. I was reading a few days ago that no less than 4,500 boys belonging to the public schools of England have been spending the summer doing farm work. How I wish our Indian High schools would do the same.

Lastly, would I like to see the study of Beauty taking a place in our courses of studies. I know not who would teach it. But the Beauty of Nature—these wonderful sunsets, these azure skies, these delightfully simple rural scenes. I do believe, that somehow, somewhere, by somebody they could be taught.

Our ideal of discipline must change. Discipline is not mechanical repression. It is the training of each boy to give expression to the highest in him, by the subduing of the lower and the selfish unto the order and harmony of the highest in him and in the community. The ideal school is the school that lives to serve where pupils are always ready to act, ready to do things each for all and all for each. It is the school where neither headmaster nor boys learn to assert rights and privileges but to find opportunity for service.

The schools are what we and our colleagues make them. We may alter the curriculum, we may build new buildings, we may import expensive apparatus, we may spend hours making and revising syllabuses. And thus we may do much to improve the school. But after all the school depends on the personality of us who teach. I sometimes think a schoolboy is the shrewdest person in the world. He knows when we are lazy, when

we have not prepared our lesson, when we have not corrected his exercise at the proper time. He can sum us up. He knows us. We determine the life of the school for him. The school depends on its men. It is Rabindranath Tagore who influences the Bolpur School and makes it a living power. It was Dr. Arnold who made Rugby not any curriculum. It was Dr. Miller who made the Christian College not the Madras Educational system. The contribution of secondary education to national life is just the life of you and me and all associated with us in the great work of educating the youth of the land we love. We give to India what we are.

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A TRIAL SOLICITED.

MORAL TRAINING.*

THE subject of moral training has engaged the serious attention of all thinkers and educationists, interested in the moral upbringing of youth, ever since the dawn of civilization. How far does the present system of education in India consciously attempt or tend to mould the moral character of our students? The Government of India in their brochure on 'The Indian Educational Policy' issued in 1913 distinctly state that "in the forefront of their policy they desire to place the formation of character of the scholars and under-graduates under tuition;" they also state that "the most thoughtful minds in India lament the tendency of the existing systems of education to develop the intellectual at the expense of the moral and religious faculties." After this tacit admission of the purely intellectual character of our education I need not lay emphasis on the defects in our system, by which no conscious and systematic efforts are being made in regard to the moral training of our boys. I may assert without fear of contradiction, that the success or failure of our education will be judged according to the degree in which we are able to promote the moral development of the children of the nation. While in no way deprecating the need or usefulness of intellectual culture for getting on in the world, we may affirm that if it is divorced from moral culture, many deplorable and even disastrous consequences might result. If our education should produce men and women, fully equipped to fight the battle of life and

overcome its trials and temptations, moral training should claim even more prominent attention than intellectual development at our hands. In this connection I may also state that, as an element in moral training, much more importance should be attached to physical exercise than is done at present in our schools and colleges. It is only a strong and well-built healthy body that will give our young men strength and courage to face the troubles of life, and other sportsman-like qualities are also invaluable in any system of moral training. Thus the inter-dependence of physical, intellectual and moral culture, should never be lost sight of.

I may prefix one observation about two kinds of educational ideals in connection with this subject. The one regards the teacher as stimulating and directing from his desk the intelligence and aspirations of the diligent and well-disciplined pupils who sit before him in the class-room. The other, and the more modern ideal, regards "school-life as that of a more or less self-governing community occupied with vital movement of all kinds; full of freedom and initiative in a great variety of tasks; getting experience of the labours and relationships which lie at the foundation of all society; dynamic, self-expressive, educatively practical, busy with the effort to accomplish things, in which they find a strong motive for effort." We should as far as possible, try to approach the latter ideal.

II

The factors that actively help to mould the moral upbringing of the child are the home, the social environment and the school. Each of them has a distinct part to play. Everybody would gladly admit that the home is the most important and suitable place for moral

* A lecture delivered by Mr. P.K. Anantanarayana Iyer, M.A., L.T., English Lecturer, Victoria College, Palghat, at a meeting of the Victoria College Teachers' Association, with Mr. C. P. Ramalinga Iyer, in the chair.

be the noblest of all. At the same time I gladly admit that the demand would be unreasonable unless the condition of the teacher, both materially and socially, is very much improved. The economic position of the teacher in India is far from satisfactory. As long as the spectre of want is staring in his face, and pinching poverty always compels him to realise his miserable lot in life, it is impossible to expect him to be wholly enthusiastic about his work, or to devote whole-hearted attention to his duties at school. Teachers in England are generally far better paid than their compeers in India; yet one of the urgent reforms advocated by Mr. Fisher in his new scheme is that of raising the pay and prospects of the teachers as a whole. If that is the case in England, how much more urgent, nay, how much more imperative, is the financial betterment of the teachers in India? Will not our Government, with its professed solicitude for improved education, follow in the steps of Mr. Fisher in England? Along with this the social status of the teacher also calls for improvement. I know it is a cry raised all over the world. Yet how can we expect the students to show reverence to the teacher, when they see that he is a non-entity in the social life of the country and very little respected by their parents or elders? The position of the teacher in society will react much on the attitude of the students. Another matter also requires our earnest attention. I strongly believe that the teachers should be vested with greater powers and responsibilities in the internal management of the school. It is not good that all the power and authority should be concentrated in the hands of the head of the institution. Following in the wake of other countries we should organise school and college councils,

in which the teachers should be represented and which should shape and guide the working of the school. This gives the teacher not only greater sense of responsibility, but elevates him in the estimation of his students. It is also necessary to secure the intelligent and sympathetic co-operation of the teachers in the administration of the school. Then and then alone can we hope for mutual confidence and harmony in the school.

V

One important instrument in moulding the moral character of students in our schools is the kind of discipline that prevails there. We all know that discipline is of two kinds, namely, the discipline of love and the discipline of the rod. I am and have always been a believer in the efficacy of the former. If the former is based on love, the latter is based on fear. The discipline based on fear might appear to be very efficient, and effective in producing order, system and obedience. But any apparent good that might be gained solely by fear is neither wholesome nor permanent, because the moment, the object of fear is removed the freedom from restraint makes the person indulge in worse actions. Moreover, the class-room is not the barrack-room, neither are the tender students soldiers nor are we military sergeants. I am afraid the iron rigour often tends to make them hypocrites and cowards. There is another method in which we place implicit faith in a certain body of rules regarded as infallible and the rigorous enforcement of these rules. This might be called the machine discipline. It makes no allowance for the characteristic virtues and weaknesses of children and boys. It forgets that they are human beings and reduces them to the position of automata or machines. The machine may be very perfect

in all its component parts, its screws tight and steam at full pressure. But it forgets that man is not a machine, but has a divine force in him, viz., the soul. This blind and rigorous enforcement of disciplinary rules in all cases, irrespective of individual circumstances and peculiarities, often produces deplorable results. I am afraid this machine discipline suppresses all power of initiative, crushes all manliness and kills all individuality in our students. If the object of moral training is to equip them with powers and qualities that would enable them to fight successfully the battle of life, then we should allow their will-power to strengthen, their readiness of resource to develop, and their courage to grow, instead of crushing them out of existence. On the other hand the discipline of love is fruitful of good in many ways. I grant that we should be strict in governing them; but we can be strict without being harsh or severe. Like justice tempered with mercy, I believe that in discipline strictness should be tempered with kindness. By love and sympathy we can more easily and successfully make bad boys good. A kindly word, a timely rebuke, or a gentle admonition, or a light punishment administered in the proper way, is often found to produce very desirable results in creating in them a sense of right and wrong and in bringing them to the path of uprightness and truth. In all cases of reprimand or punishment, the important thing is to try to convince the offender of his mistake. Then and then alone does it leave no bitterness behind, but on the other hand a desire to rectify and improve one's conduct. To engender in the mind of the student respect and regard for the teacher, a laudable desire never to displease or offend him, a healthy ambition to gain his good-will

and satisfy him by honest work, mutual trust and confidence, a bond of affection,—these are some of the results of a mild and gentle discipline. I might mention that the example of Dr. Arnold of Rugby shines as a beacon light to guide us all in pursuing such a method of discipline, which is always identified with his name. Then who would hesitate to follow in the footsteps of that revered teacher and moulder of the character of youth?

VI

I am going to make a suggestion of a rather novel character. I am afraid it may be regarded as Platonic in its ideality and Utopian in its impracticality. But it is a real as well as practical thing because it has been tried in some schools in America, Switzerland and France, in England and Norway, worked successfully and found to be highly advantageous. But in a country like India where, even our elders are denied any responsible or tangible share in the government of the country, where even the teachers in our schools are not conceded any important share in the internal administration of the schools by being elected to school or college councils, my advocacy of self-government among our students is enough to dub me as a dreamer and visionary. To illustrate my opinion I shall cite an example from America. In one of the elementary schools in New York they have established something like a miniature Republic whose governing officers are the students selected from the higher classes. They are elected by their fellow-students and are invested with large powers in maintaining the internal discipline of the school, in looking after its cleanliness and arrangements under the supervision of the teachers. They have a police department, a literary department, a games department, etc.,

They try cases and award punishments. They manage a co-operative shop and even have a savings bank where boys may invest spare money. This system has been found to be working most successfully for the last dozen years. This is not in Fairyland but on our mundane earth. I admit that India is not America. But even in India I shall quote an instance, with your permission, of which I have some personal experience. In one of the schools, in the west coast, the experiment was tried not without success. The students of each class in the high school were empowered to elect two or three able and upright students from among themselves to form a working committee. This committee working under the supervision of the class-teacher, was responsible for the maintenance of discipline and order in the class during the working hours of the day. Any violation of the school rules or any improper or unbecoming behaviour on the part of any student of the class would be reported by the committee to the teacher in charge. The matter would be investigated by these officers and if the student is found guilty, some proper punishment would be inflicted on him. As the enquiry would give ample opportunities for the offender to explain himself, and as the punishment was meted out by his own fellow-students, it had a wholesome effect on all concerned. We generally found that this investing of the students with such powers, was not only not abused but tended to create in them a sense of responsibility. And that is a great gain. I claim neither infallibility nor perfection for the system. But I maintain that it is not to be treated with a sneer, but worthy of being given a trial. Of course any experiment in that direction demands a great faith and hope on the part of those who wish to try the scheme.

VII

Of the various indirect means that contribute to moral training, the utilization of school-subjects, such as literature, history, etc., forms a most efficacious factor even from an early stage. Every teacher, according to his capacity and resources, can make a more or less efficient use of this valuable instrument. Literature deals essentially with life, and it places before us psychological and ethical problems of human life. It appeals to their imagination and emotions. A contact with the master minds of different countries of the past gives them knowledge of, and insight into, human nature and the recognition of the worth of man as man. It deepens and ennobles the soul-force of the young and awakens in them enthusiasm for high ideals and noble actions. The liberalizing influence of literature is well-known. The study of biography, by placing before them examples of virtue, heroic valour and the struggles of noble souls in achieving their noble ends, engenders in them a reverence for great and heroic men, and stimulates them to cultivate moral qualities like love of virtue, of truth and of justice. Stories of men like Horatius and William Tell are certain to arouse in them a love of freedom and liberty, a readiness for service and sacrifice for the good of their fellow-men.

Similarly the study of history, especially in the later stages, can be made an instrument for creating in our youths a sense of social responsibility and social obligation, of civic responsibility and duty to the State. These are virtues that, in these days of democracy, should be consciously inculcated in the minds of our young men by every teacher of history. Else the teaching of history has absolutely failed to fulfil its greatest and truest function.

The study of history not only gives them a correct idea of the past life of their country and its varied fortunes and struggles in its evolutionary march, but should serve to make them understand the vital part played by their nation and the special contributions made by them, to the development of the world's civilization. The teaching of history should also aim at impressing on the students the value of the moral forces in the world's civilization: how the health and strength of nations depend on the presence of great moral ideas working in them, how they are ruined when these ideas degenerate, and how even the highest human abilities work as destructive agencies when they are placed at the service, not of the public good, but of personal ambition, selfishness or fanaticism. In the same way the teacher of history will never be lacking in instances to prove that it is by philanthropy, self-denial and other civic virtues that the cause of right and freedom has always advanced in the world.

VIII

Another very potent instrument in moral training is moral and religious instruction. This subject has engaged the serious attention of our Government and our elders, especially during the last ten years, though no definite conclusions have been arrived at. In a country like India with diverse races and creeds, I admit it is a difficult problem. But in the interests of good education it has to be tackled with and solved. We know that the British Government in India is wedded to a policy of religious neutrality, but I have never heard it said that they are wedded to a policy of moral neutrality. They have always insisted that moral development should be consciously aimed at in education. No thinking person can seriously object to

moral instruction, though there might be differences of opinion as to whether it should be direct or indirect. I have already said that moral principles can, and should be, inculcated in the course of the literature or history lesson. In the case of direct and systematic moral instruction, there is one difficulty. What is the ultimate authority or sanction that we should appeal to, in teaching moral truths? Should we appeal to the personal, the social or civic, or the religious sanction? In democratic France, the teachers generally appeal to moral authority under the form of "the dignity of man, of social solidarity and moral responsibility of the citizen." In Japan, where loyalty to the Emperor and filial piety are cardinal virtues, and where patriotism is elevated to a religion, they teach that the worship of Duty is the worship of God, and all their duties to the State as citizens are duties towards God.

No one will deny that our boys very often do improper actions out of ignorance, thoughtlessness, prejudice, or delusion. They do not know whether a certain action is morally right or wrong. All such defects can be overcome by informal or formal talks with them on moral subjects in the class and by a discussion of general principles of morality, which will give them clearer and better standards of action. Such instruction can be given indirectly by means of parable or story, or poetry, which will rouse their attention and impress their imagination. The result will also be more effective if a religious spirit is mingled with moral instruction.

The question of religious instruction stands on a different plane. We can well understand why the Government, with its religious neutrality, finds it impolitic and impracticable

to introduce religious instruction in Government and public-managed institutions. At the same time we all know well that this problem has been successfully solved in the Central Hindu College, the Arya Samaj Schools and Colleges, and other private National schools. That encourages us to hope that, if approached in the proper spirit and with sufficient determination, the problem is not insoluble. As the Government and people alike feel that deplorable consequences ensue on account of this 'Godless' system of modern education, is it too much to hope that the evil should be remedied without delay for the healthy life of the whole nation? The necessity seems to me to be doubly strong, when we remember that we Hindus are an intensely religious people. Religion is at the basis of our civilization, and it permeates every phase of our individual and communal life. So it is specially incumbent upon us to make some provision to give our young men a true and rational idea of the principal doctrines of our religion. By some the home may be regarded as the proper sphere for discharging this duty; but for so many reasons we know that, under present circumstances, that consummation cannot be realised. So it is the duty of the Government and the leaders of the people to evolve a practical method out of the present chaotic state of this problem.

Lastly, whether regular and systematic moral and religious instruction is imparted or not, every one will admit that the inculcation of certain private and public virtues should form an essential element in our education if it should promote the healthy moral life of the young. Every student should imbibe the lessons of personal purity, temperance, thrift, love of honesty and truth, perseverance and

courage, sacredness of conscience, etc., if he is to succeed in life. Self-help, self-reliance, self-respect, devotion to duty, love of knowledge, are also qualities that our boys should cultivate in a large degree. The need for social virtues like courtesy and politeness, charity and kindness to animals, reverence and respect for elders, should also be firmly implanted in their minds. In addition to these virtues it is the sacred duty of the teacher to appeal to the fuller life of the students by awakening in them civic virtues like loyalty and ardent patriotism, a spirit of self-sacrifice and a readiness to forgo their self-interest in working for the common good of the motherland.

Thus we see that, if education should fulfil the greatest and noblest of functions, if it should succeed in calling forth all that is noble and good in the young mind, if it should make them grow to be strong and self-respecting men and women, and useful, devoted citizens and members of society, the question of proper moral training should engage the conscious and watchful attention of all those who are interested or engaged in the education of the youths of our country.

In Active Preparation.

COLLEGE ALGEBRA

A Text-book for the Intermediate and B.A. Classes

BY

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Srinivasa Varadachari & Co., Madras.

AN INAUGURAL ADDRESS.*

Gentlemen and students of the University Entrance class:—

Your Secretary came to me last evening and requested me to deliver the opening address to-day. I said I would not do so owing to my inability to undertake such an important task as that. But he was so importunate that I had to comply with his request.

1. *Debating Societies.*— You are aware of the advantages that are likely to accrue to you by your taking part in Debating Societies. These are days of conferences and meetings. Every educated man has to play his part in them; so he must be capable of expressing his ideas in a clear and simple language. This can only be learnt by practice. Public speaking is an art. We ought to cultivate this art if we wish to become public speakers. You know that orators are born, not made. But with practice we can become tolerably good orators. Demosthenes was not a born orator. He had stammering. He overcame this difficulty by his perseverance and industry. He put pebbles into his mouth, went to the hill-side, read and repeated passages from his books aloud. Thus by constant practice he became one of the greatest orators of his day. I suppose, you have all heard of Disraeli, afterwards Lord Beaconsfield. When he entered Parliament he made his maiden speech. All the members of the House laughed at him. He felt ashamed and left the House saying 'There will come a time when you will all laugh with me.' By constantly practising the art of public speaking he became one of the best speakers in the House of Commons. I therefore say that all of us can become fairly good speakers by assiduously cultivating the art of speaking.

*The full text of the inaugural address delivered by Mr. M. Krishna Iyengar, B.A., Headmaster, Maharaja's High School, Mysore, to the members of the Maharaja's College High School Debating Society.

2. *Obedience.*— On this occasion the next point, to which I wish to draw your attention is this. You ought to yield implicit obedience to your parents, masters, superiors and elders. A person who does not know how to obey can never command. Tennyson in his 'Charge of the Light Brigade' impresses upon us the grandeur of military obedience. He says:—

Theirs not to reason why
Theirs not to make reply
Theirs but to do and die.

Military obedience is such that if soldiers are ordered to march into the mouth of a cannon, they must do so without a demur. In his *Morte D'Arthur*, the poet says: 'Deep harm to disobey, seeing obedience is the bond of rule.' Without obedience there can be no government, so, students, it is your duty to obey.

3. *Dignity of Labour.*— Your life must be a life of labour. You must work hard and try to earn your bread at the sweat of your brow. Do you think that if you sit with folded hands in your rooms you will get on in this world? Certainly not. "Work is worship" says Carlyle. You must do your work in a very conscientious manner and leave the rest to God, thinking of the saying 'Heaven helps those who keep themselves.' Longfellow says in the 'Psalm of Life':—

Let us then be up and doing
With a heart for any fate
Still achieving and still pursuing
Learn to labour and to wait.

In this connection, I put you in mind of the famous lines of Longfellow in his 'Village Blacksmith':

Toiling, rejoicing, sorrowing
Onward through life he goes.
Each morning sees some task begun
Each evening sees its close,
Something attempted, something done
Has earned a night's repose.

A person who does his work honestly and earns his bread 'looks the whole world in the face.' Those that have read the life of President Garfield know how hard he worked. He was a

splitter of firewood and the sweeper of his college. His class-mates used to call him by the name of "Sweeper General." So, students, you must not be ashamed of doing hard work, for, that is the only way to success in this world. Pope says:

Honor and shame from no condition rise,
Act well your part, there all the honor lies.

I, therefore, tell you that you should all become men of remarkable industry without which we cannot be successful in life. Intelligence no doubt is a precious thing, but it ought to be coupled with industry that we may leave our mark in this world. What is genius? As Mill says: It is infinite capacity for pains. It is nothing but ninety-nine per cent. perspiration and one per cent. inspiration.

4. *Physical Exercise*:—The next thing for you to bear in mind is this. You must all become good animals—I mean strong, sturdy and robust men. This is an essential condition for success in life. 'The glory of a young man is his strength.' Therefore, you ought to pay particular attention to your bodily development. You must take exercises in the open air everyday, take part in cricket, tennis and foot-ball. If you have a sound body, you will have a sound mind. Milton says: 'To be weak is miserable, doing or suffering'. A weak man in spite of his intelligence cannot achieve much. You have often heard it said that the Duke of Wellington won the battle of Waterloo on the cricket-field of Eton. What does it mean? It means that the good qualities such as, courage, decision of character, obedience, patience and perseverance that he acquired while playing at cricket, one of the most manly English games, stood him in good stead in defeating Napoleon and in crushing the French power. The pleasures and pastimes of a nation go to form its character.

Indian parents attach undue importance to the intellectual training of their children. They are quite indifferent to their physical education. We

have enough of intellect and to spare. We can hold our own against the other civilized nations of the world in point of intellect. But alas, in point of physique we are far inferior to them. Men who are eager in the pursuit of knowledge ought not to ignore the body. Success in life depends more upon energy than upon intellect. However intelligent a man may be, he proves a failure in life, if he has no physical vigor and endurance. So, on no account the intellect ought to be developed at the expense of the body.

5. *Character*.—You should all become men of character. It is a true passport into society. 'Men of genius,' says Smiles, 'are respected and men of character are followed.' You must care more for your honour and self-respect than for anything else. You must do your best to earn a good name. Shakespeare says:—

Good name in man or woman
Is the immediate jewel of their head
Who steals my purse steals trash,
It was mine, it is his
Who filches me my good name
Takes that which enricheth him not
But makes me poor indeed.

You must not be proud and overbearing in your conduct. You are our hope for the future. You may get power and occupy high positions in life. But you should not "look in the clouds and scorn the base degrees by which you ascended." You must be grateful, loyal and sympathetic. When you get authority use it for the good of your fellowmen. Do not lose your head then and forget yourselves. You must bear in mind that men of character succeed better in life than men of intelligence. Burns says:—

The rank is but the guinea stamp
The man is the gold for all that.

So, the position a man occupies is not of much value, but his character is of the greatest importance. Honesty and sincerity are inestimable virtues which every man ought to possess. Humility in an educated man is really commendable, for

The bird that soars on highest wing
Builds on the ground her lowly nest
And she that doth most sweetly sing,
Sings in the shade when all things rest,
In lark and nightingale we see
What honor hath humility.

6. *Duty*.—As citizens you must all do your duties. You must make the best of yourselves, that is you must make use of the mental and physical powers with which you are endowed to your best advantage as well as to the advantage of your fellowmen. You must have a high sense of duty, you should have the spirit of mutual help and service for the common good without which no nation in this world can get on. It is our bounden duty to promote the cause of education, justice and of sanitation. You should do everything that lies in your power to elevate your countrymen, intellectually, morally and socially. It is your duty to be brave and manly and be thorough in everything that you do. You must be upright in all your dealings with your fellowmen. Above all, you must be true to yourselves. You must ever bear in mind the noble lines of that immortal dramatist:

To thine own self be true
Then it must follow as the night the day,
Thou canst not then be false to any man.

I conclude this short address with the following words of advice given by Cobbett to young men:—

"Health, without which life is not worth having, you will hardly fail to secure by early rising, exercise, sobriety and abstemiousness as to food. Happiness or misery is in the mind. It is the mind that lives and the length of life ought to be measured by the number and importance of our ideas and not by the number of our days. Never, therefore, esteem men, merely on account of their riches, or their station. Respect goodness, find it where you may. Honor talent wherever you behold it unassociated with vice; but honor it most when accompanied with exertion, and especially when exerted in the cause of truth and justice; and above all things hold it in honor when it steps forward to protect defenceless innocence against the attacks of powerful guilt."

ERRORS OF OBSERVATION.

"WHEN we can measure what we are speaking about and express it in numbers, we know something about it, but when we cannot measure it, when we cannot express it in numbers, our knowledge is of a meagre and unsatisfactory kind."—These are the words of an eminent scientist and they are of great significance to every one who treads the path of knowledge. For all that is definite and practically useful in our conception of space and time, we are indebted more to the mathematician and scientist than to the subjective or objective philosophers. The words of Lord Kelvin quoted above mark the distinction between unscientific and scientific knowledge. Not only this, but they also have a greater significance—'when we begin to measure, when we begin to express a knowledge in numbers, we begin to know something about it'—yes; the same words marking the beginning of a particular science also mark the degree of progress one has made in it. The degree of accuracy with which one is able to measure, the degree of accuracy with which one is able to express a knowledge in numbers, ought surely to mark the degree of progress one has attained in it.

But it is at this stage of our progress, that we are met with obstacles; at every attempt to measure and express our knowledge in numbers we are met with practical difficulties, marking the limits of our progress. The first lesson to be learnt by an experimenter making measurements on scientific methods is that the number obtained as a result is not a perfectly exact expression of the quantity measured, but represents it only within certain limits of error. Thus when we say that the length of an object is 3 ft. 6 in. the meaning is that this is the length within certain limits of accuracy beyond which for all practical purposes, it is not needful to go.

The object may be a shade more or less than 3 ft. 6 in. in length. If it were measured by the refined methods known to science, its true length might be ascertained to a ten-thousandth part of an inch. Even then there would be some doubt. If several such measurements were made, some disagreement would inevitably occur. The inaccuracy thus illustrated holds of all numbers obtained by measurement and experiment. In any case, one ought to bear in mind that the determination of an additional figure in a number representing the magnitude of a physical quantity generally involves a very great increase in the care and labour which must be bestowed on the determination; and in every experimental science it is also necessary that one should be on his guard against giving in the result more figures than one's observations justify. As one's knowledge advances, and as one is capable of handling and using more and more delicate instruments, one ought to be able to extend more and more the degree of accuracy with which one could express his knowledge.

To take an example—a student measures the volume of a glass stopper, by noting the volume of the displaced water in a graduated jar. If the jar is graduated to read c. cm., the student can measure the volume only to the nearest c. cm. He may, however, estimate the volume to the tenths of a c. cm. If he takes the average of the results of a series of experiments using the same stopper, but at the same time, varying the other conditions of the experiment, it is possible to reduce the accidental errors of observation and get at the true volume of the body to the nearest tenths of a c.cm. The theory of probabilities has been applied to the discussion of errors of observations, and it has been shown that by taking the mean of 'n' observations, instead of a single observation, the so-called

probable error is reduced in the ratio of $\frac{1}{\sqrt{n}}$.

Thus the probability of a certain event was found to be .3 with a probable error of $\pm .15$ as determined by the results of ten observations. The same as determined by taking the mean of one hundred observations was found to be .25 with a probable error of $\pm .05$ and as determined by the mean of a thousand observations was .270 with a probable error of $\pm .019$.

The last doubtful figure may however be useful in estimating the degree of accuracy of the result of a further experiment in which the volume of the stopper is a factor. Thus in finding the density of the stopper by dividing its mass by volume, to know the degree of accuracy of this result, it is necessary to ascertain the degree of accuracy of each of the two measurements involved in it. In the previous example, since the volume of the stopper can be measured in c. cm. only, if the mass of the stopper be 15.6 gms. and the volume 6.2 c. cm., the last figures being open to doubt, it is absurd to give the density of the substance as 2.5161 gms. per c.cm.; the figures got in the quotient after the first decimal place are very doubtful figures; so the student is justified in giving the answer only to the first decimal place. Since the maximum limits of error in the observations is $\pm .05$ the maximum limits of error in the result got is $\pm .03$ (Ans. 2.52 $\pm .03$). If a greater degree of accuracy is required, the student should have recourse to more accurate methods of determining the mass and volume of the substance. In the example given above, if the student is able to use a more accurate means of determining the volume of the stopper, he may increase the degree of accuracy of the density. Thus, if the mass of the stopper in air is 15.564 gms., correct to a milligram, and the loss of

weight of the stopper when weighed in water is 8.233 gms. correct to a milligram, the density is $2.4970 \pm .0003$ gms. per c.c. The last figure in the answer being open to doubt has to be corrected by taking the average of a series of observations. At each stage of a student's progress, there is a limit to the degree of accuracy that may be expected of him; to expect more is unreasonable, if to be satisfied with less is unscientific.

It is further to be noted that in many cases, there are several quantities to be measured for one experiment. Some of these quantities are capable of much more accurate determination than others. In such cases, it is useless to carry the accuracy of one quantity alone beyond the possible degree of accuracy of the least accurate of the quantities measured. To illustrate—in the example stated above, if the volume of the stopper can be measured only to a c. cm., it is useless to carry the determination of the mass to a milligram or even to a centigramme. For a similar reason, in specific heat experiments by the method of mixture, the determination of the mass to a milligram or even to a centigramme is unnecessary, when the temperature can be measured only to the tenth of a degree. In many cases, however, the degree of accuracy can be enhanced by a careful selection in the method of procedure. For example, in experiments on the pendulum, the use of a centre second's stop watch, and the calculation of the time of vibration from a number of vibrations, say 30 or 40, enables us to reduce the probable error to a certain extent. In certain other cases again only one particular arrangement of the magnitudes of the quantities employed yields the best results in an experiment with a given set of apparatus, for example, experiments on Latent Heat and experiments involving the use of the Tangent Galvanometer.

More serious than these are the errors due to the defects inherent or otherwise in the apparatus, for which corrections have to be made in order to get at the true result. Omission to make such corrections is a very common mistake with beginners. Omission to take into account the weight of the moment bar in experiments on moments and parallel forces, omission to take into account 'friction' in experiments on machines, omission to make corrections for zero displacements in experiments with screw gauge and spherometer, are some of the examples for such errors. These and such things as these are problems which should engage the attention of the practical scientist and upon the proper solutions for these problems and their applications depends the value of the results of his laboratory work.

S. KRISHNAMACHARI.

Lower Secondary Arithmetic

BY

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16th Edition—Revised.

Re. 1 per copy.

Srinivasa Varadachari & Co., Triplicane, Madras.

EDUCATIONAL ACTIVITIES IN ENGLAND AND IN INDIA.

A CONTRAST.

'OUT of evil cometh good' and one striking instance of the truth of this is afforded by the fact that in the midst of the terrible struggle waged in the continent for the liberty of nations, we find the English people having realised the defects in the educational system of that country and paying their earnest and immediate attention to the cause of education so vital to the healthy life of a nation. The importance and urgency of the problem is all the more enhanced when it is seen that it is taken up at a time when the nation is staking all the resources of the State for the successful termination of the gigantic conflict. While it should be admitted that the Education Bill drafted by Mr. Fisher would, of course, be a great drain on the financial power of the nation, it is, on the other hand, to be remembered that the new system is sure to 'prevent young men and women running into seed,' 'to establish the physique and therefore the earning power of a number of future workers' and 'to promote a more extended and more economical use of machinery.' To achieve this end, Continuation schools, Agricultural schools and Industrial schools are to be established throughout the length and breadth of the land and Secondary schools and Colleges are to be increased considerably. And, last but not least, it has been recognised that unless and until the economic condition of the teaching profession is placed on a satisfactory basis, the question of education can never be successfully solved. For, it is said with the greatest insight into the question at issue, that 'You cannot get good education unless you have good teachers and you cannot get good teachers unless you are prepared to pay for them.' 'We cannot allow teachers in

our national schools to be exploited on a starvation wage.' Not content with this, Mr. Fisher goes on to say that he will not be satisfied unless the teacher's claim for Provident Fund or pension is favourably settled. The teachers as a class are doing national service when they dedicate their lives to the education of the future citizens and they are to be recognised as such.

In strange contrast with this, what do we find here in this vast land of 316 millions ruled by the very same high-souled, justice-loving Britishers, after more than half a century of settled and peaceful administration! Education is yet kept in the background, though every now and then we hear of feeble attempts at trivial improvements in the shape of a Directors' Conference or a Conference of experts for the better mode of teaching English. It has become a fashion, more or less, now-a-days to cry up Elementary education and establish a number of schools at random and then after a time find neither men nor money for the improvement or extension of the same. Higher education is discouraged not only by stiffening the curriculum and the nature of the examinations but by making the High schools and Colleges difficult of access to the poor who are not a few in this blessed 'land of beggars.' We are lately having a Headmasters' Conference to boot. This for its part has created a schism in the ranks of the teaching profession and has aroused serious alarm in the minds of assistant-masters. What its achievements will be, how far the members would confine themselves to the solemn pledge given by the organisers as to the scope of their activities and how far some in the 'fold' may not use this as a tool of oppression, are questions to be answered in due course and awaited with keen interest by the assistant-masters, managers of schools and the parents of pupils. The pay

and prospects of teachers are as blight as ever. Schools with Provident Fund schemes are mere exceptions and judged from the too frequent change of staff in schools in general one cannot resist the conclusion that the position of a school-master is in no way better than that of a day labourer earning his daily wage. As it is, a B. A., L. T. gets Rs. 70 to start with and he is to remain content with Rs. 90 or in a few cases Rs. 100 for life. A Secondary grade teacher starts life on Rs. 25 generally and never draws more than Rs. 40 as a rule. This is the case of teachers in private schools and the lot of teachers in Municipal and Local Boards is much worse. Not only is their salary a few rupees less but there the restrictions placed on them are too many. They have all the disadvantages of public service with no corresponding benefits. The worst of it is, that due, probably, to some practical difficulties in the way, the authorities do not seem inclined to bring their influence to bear on the management to adopt a uniform scale of decent salary that would place the teacher above the mercy of the money-lender. When will the Government open their eyes wide to discern this grave defect and take active steps to alleviate the poor lot of teachers? Cannot our Municipalities and Local Boards, constituted as they are by men of light and leading and representing the interests of the 'sons of the soil,' do something in this direction and set an example to the Departmental experts themselves, for the reason, above all, that it is the nation's cause which is after all being jeopardised? Unless we have a body of contented and happy set of workers in the active field of education, the cause of education will surely suffer. Private service in the field of education should be made as attractive as Government service itself and as stable, because no one can deny the fact that

teachers are doing a public and national service that is at once sacred.

Thus the problem of education in this country stands in urgent need of reform and nothing earnest and useful has so far been done. It behoves the Government to bestir themselves at least now, following the example set by the mother country, to institute a Committee consisting of educational experts of the whole of India along with a good many laymen interested in education and invite schemes of education suitable to the times and meeting the national aspirations. The scheme so drafted must be published for public criticism and then adopted in the whole of the country.

S. GOPALA AIYAR.

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WITH A PREFACE BY

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Editor, *The "Hindu," Madras.*

Price—Rs. 2.

SISTER V. BALAMMAL,
"Vivekasrama," Royapettah, Madras.

SANSKRIT EDUCATION IN OUR VILLAGES.

"BUT there was one permanent, and on the whole beneficent influence, universally present which secured or rescued the study of letters from utter annihilation, I mean the authority of the Brahmin caste." These are the words used by an Englishman, when he was speaking of the village schools in India, before the advent of the British. Whatever may have been the defects in the curricula and the methods of teaching adopted by the village Sanskrit schoolmaster, we cannot but be thankful to him for the preservation of our ancient culture "through long periods of darkness which history has not yet succeeded in penetrating."

Little affected by the changes around, the Sanskrit schoolmaster, in our Agraharams, still plods on his time-honoured profession. Crossing his legs on the shady pial of his cottage, he may still be seen initiating his sishtyas into the mysteries of the Sanskrit lore. The sing-song tone of reading, the *Padavi-bhaga*, the *Artha*, the *Akanksha*, and the *Thathparya* is still the order of the day. The *Sabdhamanjari*, the *Amarakosa*, and the *Dhathurupavali* still continue to be memorised by the young, before they are introduced to the language proper. The course of instruction in the *Sahithya* occupies about six years, and the curriculum comprises of a few *Sargas* from the five *Mahakavyas*, one or two *Champus*, one or two master-pieces in the *dramas*, and a work on rhetoric. Then only commences the specialisation in any one or more of the *Chathus-Sastras*, namely, *Tarka*, *Vyakarana*, *Vedantha*, and *Meemamsa*. The other branches of knowledge, viz., Astronomy, Astrology, Mathematics, Medicine, Political Science and others, though at times are brought under the appellation of a *Sastra* are left without any votaries at all. The *Dharma-*

Sastra seems to command some attention, but not as much as the *Chathus-Sastras*. It is about one *per cent.* of the scholars at school that come up to the very end, and are recognised as *Vidvans* in their respective branches. The rest do not even continue to the end of the *Sahithya* course. Since there is no vernacular taught by the Sanskrit schoolmaster, the majority of the scholars are at a great disadvantage when they enter life. There are practically no exercises on composition, oral or written, either in the vernacular or in Sanskrit, and hence many of the scholars are miserably wanting in expression. Thus they fail to make any favourable impression on the world outside their own little villages. The little they read is either totally forgotten, or leads them to some unpractical dreams.

If only the instruction is adjusted to the changing needs of the times we are sure we can produce healthy scholars with practical wisdom, so that their presence will be altogether beneficial to their less-educated brethren in the villages. There will then be a clearer understanding of the civil rights and duties, and a sensible adjustment of some of the ancient customs still current in our villages, tending to a better understanding between the various communities. The meaningless superstitions in which the villagers are actually plunged, and the consequent obstacles to the acquisition of fresh knowledge will become things of the past.

Everybody handles a *Panchangam*, but no one tries to understand what is meant by a *Thithi*, a *Nakshathra*, a *Yoga* or a *Karana*. Even the *Poorohit*, who is viewed as an authority in reading out the *Thithis* and the *Nakshathras* on any day, does not know what they are and how they are calculated. Every villager professes himself to be a family doctor, and if his methods of cure succeed in a few cases he comes forward as a *Vaidyan* of the village. Excepting the village school-

master there are generally none to write even an ordinary petition or an application. In general, the men of the higher caste have no other occupation than squatting on their pials or pulling each other's noses.

The present appalling condition in our *Agraharams* is mostly due to the utter lack of instruction in the humanitarian branches of knowledge. We therefore advocate the inclusion of such branches in the curricula of the village Sanskrit schools. This procedure will have also the other advantages of keeping our ancient works in these branches from becoming enigmatic, out of disuse. Before the pupils are introduced to Sanskrit, it is advisable that they should have a course of instruction in the vernaculars for at least five years. The present Elementary Education up to the Fourth Standard is, in a way, a good basis for the Sanskrit study. The question of *Amara* and *Sabdha* being postponed, the children may be introduced to the study of the language proper. Without much ado about the methods, we may safely continue in our present Translation Method. Before introducing the children to the *Slokas*, a few months we may make them spend with advantage on small sentences in prose. The several forms of words the children may be advised to note and tabulate. To start with, they may be introduced to only two Parts of Speech, the Noun and the Verb. Being already instructed in the simple grammatical principles of the vernacular in their Elementary Schools, the pupils will not feel it difficult to tabulate the Nouns under the several cases. When a sufficient number is tabulated, the teacher may introduce a "Sample *Sabdha*" and try to elicit the analogous forms from the pupils. He may then ask them to get by heart the sample *Sabdha*. The teaching of *Dhathu* must also proceed on similar lines. The student will then clearly understand why such and such is the case, and he will even take pleasure in finding out

for himself the analogous forms. The question of the *Nighantu* may also be given a similar treatment, the student being advised to make careful note of the synonymous words, and the teacher finally giving him the line from *Amarakosa* connecting these words. Several independent *Slokas* from *Amara* may thus be got by heart, and if the student exhibits a desire to follow the order of *Amara*, he may then be given a chance to do so.

The fortnightly examinations generally conducted on the *Chathurdasi* may alternately be oral and written. Together with the *Kavya* literature, it is necessary that the students are introduced to a little of Mathematics, Astronomy (without the higher mathematical calculations), and that branch of the Medical Science dealing with the Physiological section and with the most common and simple diseases, with their homely remedies. Select portions from such books like the *Leelavathi*, the *Surya Siddhantha* and the *Charaka Samhitha* may be prescribed for the purpose.

At a higher stage, but before the course in the *Sahithya* proper is completed, the pupils must be introduced to some of the *Neethi Sastras* and the *Dharma Sastras*. *Kamandakeeya* or *Chanakya* for the former, and *Manu* or *Yagnavalkya* (especially the *Vyavaharakanda*) for the latter will suffice.

With this humble scheme our village Sanskrit education, even though it happens to end in most cases with the *Sahithya*, will be more useful to the country than the mere study of the *Pancha Kavyas* which often produces an unwholesome effect on some of the weaker minds. But the question is—Who is to undertake the instruction in these subjects, most of which are more or less replete with technical terms which appear quite enigmatic? We answer—It lies with such of our Anglo-Sanskritists as happen to boast of a village home to gradually reform the village schools, by spending at least a few months in the year, educating the schoolmaster in these branches and helping him in his onward march.

K. KRISHNAMACHARYA.

THE STUDY OF LITERATURE IN SECONDARY SCHOOLS*.

THE object of this paper is to define the place of good literature in secondary education, the object and scope of its study, the method of instruction and exposition, the qualifications and the material equipment needed of those who have to teach it.

By good literature is meant not all that attains to the dignity of print, nor the information or moral lessons 'made to order' of graduated series of reading matter, found in most of the modern Text-books. We mean, rather that select body of prose and poetry which the world of cultivated persons, would style Literature. 'To be at home in it' and make others also feel 'at home' in it is the teacher's province and duty.

'Literature portrays human life, its activities, its ideas, its emotions and those things about which human interest and emotion cluster. It presents them in forms which are often, of themselves pleasing.' It does not stop with mere portrayal but presents its pictures and ideas in such a manner and in such relations as to give them a new interest, a new meaning. It colours them with emotion and interprets their significance. It gives the personal point of view of the author, the memories and combinations he has made of them, with the resultant inferences and emotions." [To those who are conversant with the type of that 'poetry of silence and remembrance' as Wordsworth's 'Daffodils,' 'the Solitary Reaper,' 'Ode on the Intimations of Immortality,' 'Tintern Abbey,' 'Yarrow Revisited' and Shakespeare's 64th Sonnet, the significance of the last statement will be clear.] But to be the literature of the highest order, the personal point of view of the author should win universal acceptance as being true in essence. [That is why Shelley to some extent and Byron largely, have failed, as their personal points of view were not in essence, universally true. Of the remark on Shelley—"a beautiful but ineffectual angel

* The first part of the article was the subject of a paper read by me before the Teachers' Association, Caldwell High School, Tutuorin.

beating in the void his lamious wings in vain'—.] Literature, therefore, is a true 'interpretation of life' or a phase of life, as Matthew Arnold would put it, 'a criticism of life.' Such literature, being the work of syntheses and exposition and a beautiful work of art to boot, is of the highest value, in acquainting the young with life as it is, in its more permanent and universal aspects, and with the judgments upon it, the interpretations of it and the emotional colouring given to it by writers of "wide knowledge, deep insight and right feeling."

The educational value of literature lies in its presentation of the conflict of moral ideas, the struggle of passion against what is rational, the attacks of sin and crime against the divine order of the world and all that is deepest in human character. Literature faithfully depicts the drama of human life in all its phases, its tragedy and its poetry, shewing how 'character issues in action' and action out of character! Cf. Shakespeare's plays, the tragedies especially. They portray such serious collisions between the good and the evil, and like the mountain upheavals, that break and tilt up the strata of the crust of the earth, and reveal to the geologist the sequence of the formations from the most primitive to the most recent, so these artistic situations, reveal to all men the successive strata in the evolution of human thoughts, emotions, ideas and actions. Thereby one single individual comes to know of the springs of action of his fellow-men.

But one may suggest, here, that such literature as I have been defining has no place in secondary education; that Shakespeare is beyond the pale. True, but not his plays, as admirably written in prose by the Lambs. Such study of action and interaction of character, and that of the springs of human action can be made even in the prose version. The Lambs and Quiller-Couch have done that incalculable service to the young. I shall dispose of two more objections. To the objection that literature sometimes portrays the exaggerated and impossible and the immature mind grasps only that without finding

the underlying truth, the answer is, a wise selection and well-chosen and thoughtful reading, will make the reader the wiser in the realm of human spirit for reading it. There is the second, that mere knowledge of books does not bring knowledge of life. No; other experience and contact with life, in other ways, is also necessary. But a knowledge of books is doubly useful in after-life. For example, if a piece of literature is remembered as a representation of some fragment of the drama of human life, it remains there to produce new emotions and to stimulate new ideas as the mind becomes enlarged by new experience. The memory of Robinson Crusoe's single-handed fight with nature means something to the boy, in imagination, but much more to the man who has had a decade of struggle for a foothold in the world. 'The Tale of Two Cities' may be a pathetic though enthralling romance to an imaginative youth, but to the cultivated mind, 'the moving finger' of destiny, in the enveloping action of the story is vivid and that, to a sunken but noble soul, that has let slip all elevating opportunities of life, regeneration comes of true, even if it be impossible, love, and that redemption lies in sacrifice, are strikingly brought home in the portrayal of Sidney Carton. "Greater love hath no man than this, that a man lay down his life for him."

Next to the knowledge of human life and nature, literature supplies a means of training. The mind grows by acquiring ideas, by the exercise of memory, imagination and judgment. Literature contains all the material essential, interesting in itself and ordered in such a way that immature minds can follow, for the best means of promoting such growth. It widens the intellectual horizon and presents those concepts and interests of human life in illuminating relationships. These concepts are not purely idealistic, or abstruse and abstract; more than those of science and mathematics, these concepts are the habitual and essential subjects of human thought.

Then, literature is the source of the highest pleasures. It amply satisfies the aesthetic sense. The pleasure literature affords us, is incapable of analysis. If we tried, we would be as successful

as in analysing humour. It is a pleasure to be felt, in thrills or subdued rapture. As we read Shelley's lyrics, say the Skylark, or Keat's Ode to the Nightingale, we are lifted higher and higher, in realms of fancy, until we feel we are no longer of the earth; in thrills of emotion, too keen for analysis or expression, in rapturous ecstasy, we are wafted on, in waves of thought, 'Chariotted not by Bacchus and his pards, but on the viewless wings of poesy! As we entune ourselves to that sweet mood of Wordsworth, when 'motionless and still' he hears the sweet strains of the solitary reaper, the music passes through our imagination and memory into our very lives, when, we echo

'The music in my heart, I bore,
Long after it was heard no more.'

This characteristic of Wordsworth makes for that true and exquisite 'poetry of silence and remembrance.' Next to the responsive call of the highly vibrating notes of impulse of the lyric, our natures feel an immensity of comfort and solace in such 'poetry of silence and remembrance.' As we listen to Wordsworth, in that expectant attitude and recipient, we catch the flash on that inward eye, which is the 'bliss of solitude;' 'Our hearts with pleasure fill, and dance with the daffodils.' Let us take a few gems from Kambar. It is impossible to express or convey the pleasure felt on reading the following:—

"மண்ணினைக் காக்கின்ற மன்னன் மைந்தர்
கண்ணினைக் காக்கின்ற பிமையிற் காத்தனர்."

"வரிசிலை யண்ணலும், வாடகணங்கையும்
இருவருமாறிப்புக்கிடய மெய்தினார்"

"அந்தி வந்தடைந்த தாயைக்கண்ட ஆண்
கன்றின் அன்னன்."

"மஞ்செனத்திரண்ட கோலமேனியர்

மகனிற்கெலாம் மஞ்செனத் தகையவாகி,"

"உலகம் உன்வான் வலிசாண, யான் கொண்டு
டாடும் வண்ணம் இராமனைத் தருதியென்பால்."

"காயந்தன சலாகையன்ன, வுரைவந்து கதுவா
முன்னம் தீந்தனசெவிகள்,"

‘அஞ்சலியரக்க பார்விட்டல் தரமடைந்தான்
மே,” etc.

Literature then, is a thing of beauty and as such it should be and can be enjoyed by all in varying degrees. The question is, can we make young pupils and children understand and appreciate the æsthetic part of literature. The sense of beauty is inherent in human nature. It is either latent or active. That most young boys have the sense of beauty, and display it, cannot be denied. The study of bright and beautiful stories is one of the pleasures children find, when they enter into possession of the intellectual kingdom. Such stories appeal strongly to the imagination, which creates for them a world of unspeakable delights. Who is there amongst us who does not possess a happy recollection of the study of Arabian Nights, of Gil Blass, of Crusoe, Jack the Giant Killer, and Little Red Riding Hood? I, myself, have studied the Arabian Nights more than a hundred times, only to find it afford perennial pleasure, which repetition does not cloy nor custom stale. Tennyson's "A Dream of Fair Woman" and "Recollections of Arabian Nights" and Keats' Sonnet, "On first looking into Chapman's Homer," bear testimony to the poets' record of what such pleasure meant to them. To us, who are less gifted, though the pleasure is less, its value is not to be ignored. The beauty of the world of 'once upon a time' where nothing was wrong, or if wrong, was spectacularly punished, where something was always happening, where the skies were blue and the woods green, where the plants were fresh and flowers always in bloom, may be an elementary type of beauty. But it *pleases* the child and *helps to develop* his taste. His admiration, if properly fed, grows, until it takes in higher forms of beauty, passing from the simple, gradually, to the higher æsthetic pleasures. Next to the pleasure of imagination, comes the pleasure in the beauty of the picture

suggested, or in the exquisite phrasing or rhythmic sound. Cf. the following:

The choice of circumstances and the arrangement of the words are beautifully adapted to express solitude and dumb silence.

"Deep in the *shady sadness* of a vale
Far sunken from the healthy breath of morn,
Far from the fiery noon and eve's one star
Sat grey-haired Saturn, *quiet as a stone*."

Cf. this pictorial passage, a moving picture,—a cinema effect is produced.

"And as a spray of honey suckle flowers
Brushes across a tired traveller's face
Who shuffles through the deep dew moistened dust,
On a May evening, in the darkened vale
And *starts* him, that he thinks a ghost went by—
So Hoder brushed by Hermod's side."

or Shakespeare's

'And Jocund day stands tiptoe on misty mountain tops.'

Here is 'gesture, motion, action' picturesquely portrayed:—

"Then with a slow smile turned the lady round
And looked upon her people; and as when
A stone is flung into some *sleeping* tarn
The circle widens till it lip the marge,
Spread the slow smile tho' all her company."

For rhythmic sound or harmony:

"I heard the *ripple washing* in the reeds
And the wild water *lapping* on the crag."
"Drinking is the soldier's pleasure
Rich the treasure
Sweet the pleasure
Sweet the pleasure after pain."

Higher still, comes the pleasure in high ideals, inspiring generous emotions, as a result of studying Scott, Kingsley, etc. As a subject that tends to the cultivation of the moral sense, literature holds a high place. The mind filled with beautiful ideas of literature is less open to sordid temptations of gain, to the pettiness of gossip and slander, to the seductions of the sensual. Every mind will have a treasure-house of pleasant images. Take the stanza of Kamban, when Rama is asked by Kaikeyi to depart to the forest, just

as he was about to be crowned. Sri Rama replies

"மன்னவன் பணியன்றாகில் நும்பணி மறுப்பேனே
என் பின்னவன் பெற்ற செல்வம் அடியுன்
பெற்றதன்றே
என் இனி யுறைப்பது, இப்பணிதலை மேற்கோண்
டேன், மின்னொளிரகானம்
இன்றே போகின்றேன், விடையும் கொண்டேன்."

What a beautiful ideal of conduct? Is there aught in the whole range of literature of any country to match this? A mind that has been fed on such material will surely be 'moral.'

Turning now to the English Literature, if the materials be such as supplied by Scott, Dickens, Kingsley, Lamb, Hunt, Stevenson, Tennyson, Edgeworth, Irving, etc., the enlargement of the imagination goes on rapidly in well-ordered channels and the foundation for high ideals, inspiring generous emotions, is laid.

The importance of the elements that enter into this expansion, between the ages of 12 and 18, coincident as it is with the growth of manhood, cannot be over-estimated. Hence, the teacher should see that boys do not read vacuous novels or sensational stories or any of the 'pot-boilers.' No century, as the present, has seen such an enormous output of voluminous stuff of vacuous stupidity as the modern novels. It behoves every teacher, therefore, to carefully and usefully guide each pupil, (in the library period) in his selection, so as to help him avoid reading what is positively and dangerously bad.

Good literature supplies good ideals of conduct, makes the good attractive and the mean ugly.

"Imitation is the strongest impulse to action in childhood and admiration is the strongest incentive to imitation." Children and boys, especially those with good imaginations, feel strongly an impulse to imitate their heroes.

A good story is worth a dozen precepts. Let me give a personal instance. As a youth, I perused 'St. Elmo' by A. Evans Wilson. Its effect on me was most elevating and its influence has been

most abiding. Blessed with all that nature and fortune could bestow, St. Elmo, despite his gifts, was the poorest of men. He was a cynic and lacked that belief in humanity and Providence, that makes a man or a woman really great. He was a misanthrope and an atheist, believing neither in God nor in man. But the influence of the heroine, Edna Earl whom he loved, and who loved him in return, but, as a pure and goodly Christian soul, dared not marry him, worked a miracle. Her love for him was deep and genuine. Still she would rather sacrifice herself, 'withering on the virgin thorn' than 'make herself earthlier happy' by marrying him. By a subtle and wonderful process, so beautifully portrayed by the author, St. Elmo turns a Christian, true and pure. The story is highly emotional and the reader *feels* 'the influence of one loving human soul over another, not calculable by algebra, not deducible by logic but mighty and potent as the mysterious power by which a tiny seed quickens into life, grows into a tall stem, finally bursting forth into a stately and tasselled flower.' I closed the book. I rose a better man. The man, whose mind is softened by pity and guided by reason is likely to be moral.

Therefore, the claim of literature rests on the following grounds:—

- (1) as a means of knowing life;
- (2) as affording mental training;
- (3) as enriching and developing imagination;
- (4) as affording æsthetic pleasure;
- (5) as an ethical force, cultivating a moral sense.

II

What should be the aim in teaching literature then and the method? First a knowledge of the subject read, is absolutely essential, involving a general comprehension of the parts as a whole. Therefore ordinary teaching must include the meaning of words, of sentences, the relation of the parts to each other and to the whole piece, and the general thought involved in them. The

pupil may be told these, better, if he is led to discover them. The boy may understand a story or a book. Still the book or story may seem dull. This is the result of a grave failure on the part of the teacher. True success in teaching literature consists in helping the boy get both the thought and the feeling, to supply him with the necessary associations or materials, out of which to make them for himself, to show him the beauty of form, the fitness of the phrase, the truth and universality of the ideas and the music of language. In helping the boy appreciate literature thus, the *personality* of the teacher and his attitude towards things beautiful play a large part. Taste and feeling are contagious. What the teacher has to give, most of the pupils will get. In my experience, I have noted that the best pieces of literature had been so handled as to inspire the pupils with disgust. Such teachers, surely, are to be congratulated on their unique knack of making dull the most lively pieces and a not too indulgent management should set about its business and relieve such experts of the trouble of teaching English. The meaningless custom of making senior masters, (who may be experts in subjects other than English) teach English, willy nilly, ought to give way. A successful teacher of English is born, not made. He has and must have those special aptitudes and talents, which mark him out as a teacher. His qualifications and training ought to be special. Only one, with these requirements should, in our institutions, be allowed to handle the subject from the lowest to the highest class. The present system, obtaining in most schools, of allowing pell-mell, all and sundry to teach English to the classes is pernicious. Lack of interest on the pupils' part is not the result of poverty of their training or intellect but it is due to the lamentable want of special capacity in the teacher. In the lower classes the appeal to the ear, the eye and the imagination is to be made. Literature is a thing for the ear as well as for the eye. Much should be read aloud to the pupils by

the teacher, with the proper *gesture, motion, feeling and tone*. The fitness between the sound and the idea often escapes the boy unless he hears them. The more resonant types of literature are the best for early years. Nursery rhymes in the beginning, later, heroic poems like Campbell's, Tennyson's, Mrs. Hemans' and Dryden's 'Alexander's Feast,' etc., may with advantage be read to the boys. The oral reading by the teacher is often a good means of passing in review the whole poem and comprehending it as a single unity. It is, again, of great value in arousing interest before even a closer study begins. Many boys owe their first real appreciation of literature to some good reader. I should suggest to all teachers to try this in the library periods. They will earn the gratitude of boys for having created in them a genuine desire to read good literature.

After reading a good poem or prose piece as a whole, an effort must be made to make the boys grasp the clearness, force, aptness, and the precision of the words used. The habit of constructing words from the context, should be strongly discouraged. This insidious vice of guessing the meaning of words is common to many otherwise thoughtful readers. Even teachers are apt to err that way. The full significance of the picture suggested, or the picturesqueness of a passage cannot be got at, except by an intensive study of the words and phrases. The main contention of my paper, in fact, is a plea for intensive study of words, passages and the piece as a whole. In this connexion, I may draw the attention of all to the remarks that recently appeared in the *London Times Educational Supplement*, re the improved methods of teaching English in schools. Commenting on the slipshod style of composition, very common among a large class of Englishmen, the *Times* suggests that one remedy to combat the evil, is an intensive study of the language and literature. The grammatical structure, style, and other qualities of language, will be

more clearly perceived and learnt if an intensive study be made. If we now turn to the Viceroy's remark, in his opening speech at the Educational Conference, that hitherto greater attention was paid to the teaching of English literature and less to the study of the language as a living one, we can see that the result of having taught literature in a non-intensive method, is a want of due appreciation of the structure and other qualities of the language and a consequent inability to use it carefully and effectively. Failure to acquire a mastery of the language to use it effectively, is not due to any neglect of the study of language. Rather, it is due to absence of intensive study of literature. If literature is studied, as the French do, (the method of 'Explication') as classics were studied, as even our vernaculars were learnt at the feet of 'masters,' the pupils will have learnt the use of the 'living language' and acquired a fair mastery of it. Unless and until that is done, literature does not yield to us all the pleasures. Those who are familiar with Ruskin, will remember what he says, in his 'Sesame of the King's Treasury,' of 'Men of Letters.' Great writers are so called, not as men of books, nor even men of 'words.' The significance of the title lies in the fact that such writers know the use of the letters too well to misuse or misplace them. Every word of a creative genius is weighed and weighted. It cannot be replaced without sacrificing the sense or marring the beauty of the passage. For example, take Shelley's 'Rain-awakened flowers' or Tennyson's 'The smell of dying leaves and the low-moan of leaden-colored seas' or George Eliot's description of the Mediterranean as 'the mid-sea that moans with memories,' or Keats' 'with beaded bubbles winking at the brim' or Milton's 'blind pastor,' etc. Notice the aptness, precision and combination of words. One can make such a useful study of Gray, Milton, Shakespeare, Tennyson. One more example, from Kamban, the Tamil poet. In

speaking of the birth of Bharatha, the last line ends thus:

"மாசுறு கேயன் மாது மைந்தனை." The attribute 'மாசுறு' is to 'கேயன்' and not to Kaikeyi. A little intensive study will shew why Kekayan's absolute purity of conduct and spotless character are inherited by his grandson and not by his daughter, to whom he gave only 'beauty' (மாது). One wonders, if Kamban had not known the law of heredity, that a characteristic, moral, or mental, exhibits itself in the 2nd generation, and that a leper's or a genius's grandson, by his daughter is more likely to inherit the trait or virtue than his son or daughter. It is significant that the poet has not written 'கேயன் மாசுறு மாது மைந்தனை.' The grandson inherited the spotless character of the grandfather, the daughter only physical beauty and perfection.

Hence new words must be learned in their sound, in their form, and in their application; a study of the derivation of words, the different shades of meaning, etc., may usefully be made in the higher classes. Such study is doubly helpful. It helps pupils and teachers realise and appreciate the art and beauty of the literary piece studied, and in writing composition, it will check the hasty use of an incompletely understood word or the positive misuse of an expression. If the boy had been led to discover the full significance of a word in his appreciation of its application to a piece of literary art, he would consider it a crime to make an indiscriminate use of words in his written work.

Difficult passages should be 'paraphrased' to clear *vague impressions*, apart from eliciting their gist; oftentimes a useful analysis may be made with an eye to removing complexities. Figures of speech should simply be explained in literal language. It is enough, if the boy grasps the significance of the figure. A minute analysis is useless if not hopeless.

English literature is again highly allusive.

The point of a good thing is often lost, if the allusion is not known. If one knows the origin and significance of the allusion, one may understand the passage. But to appreciate it, to get the feeling that such passage should arouse, in short, to enjoy it, one must have known the allusion in the original. Hence, wise teachers will see, that, in the library periods, they not merely aid the boy to get at the allusion by looking up a book of reference but make him learn the allusion not as such, but as a first piece of literature. The boy who has read Tennyson will appreciate a reference to Enoch, or Lancelot better, and one who has read Macaulay's ballads, will enjoy a reference to Horatius, more. To enjoy Milton an acquaintance with the English Bible is essential. A reference to Bill Sykes or Fagin, cannot be appreciated without studying Oliver Twist, nor one to 'Malaprop' without reading Sheridan. Here we see a splendid opportunity for the utilisation of the library period. Let the teacher collect the allusions his class will come across. If they be to Greek mythology, let him suggest to the boys to read Kingsley's *Heroes*, or Hawthorne's *Tales* or Lang's *Tales*. If the allusion be to other English writers or their works, let the teacher dish up those books for the boys' feast.

In reading, boys derive the greatest pleasure in creating mental pictures of the scenes and actions they study. The teacher should try his level best to promote such visualisation, on the boys' part, as the readiest means of reaching their emotions. Such pictures of the imagination, evoked by good literature, are 'a better stimulus to right action and a more potent cause of good taste than reasoned or abstract rules of conduct.'

Finally a literary work is as much a piece of art, as a painting or a sculpture, and as such, has a definite, finished structure. The several parts of the story should be studied with an eye to the unity of the piece. 'To appreciate the structure is a part of good reading.' A good story

will generally have a beginning, a middle and an end, with a proper setting. There would be an inherent fitness between scene and incident. There would be a regular sequence of causes and effects. But the teacher should not attempt a minute or critical analysis. If the teacher is well qualified for the task, and the pupils are sufficiently advanced, a whole poem or story may be studied as a presentation of some phase of life by the author. But, generally, this aim cannot be achieved in Indian schools. Boys may be asked to memorise good pieces.

A mere class-room treatment of literature; however intensive, will not go a long way. 'Home Study' on an extensive scale is needed. To foster it is the teacher's prime duty. In the library period, the student must be made to apply himself to a subject and master it as far as he can. Let his outside study be extensive, that is enough. But the teacher will do wisely, if he gives the pupils certain topics to consider, certain questions to answer, on the literature he is asked to study. Say, the boy is reading Lang's 'Troy,' the teacher may suggest to him to read Dewitt's books and analyse the state of Greek society in the Homeric times, contrasting it with that of the period of Epic India.

In the library period, another thing the teacher should inculcate. The art of using books and papers well and economically, must be learned as a means to intellectual life. The boy must be taught to pick and choose, to learn slowly or read quickly as the needs suggest. The rapid and cursory reading that is enough for lighter and simpler stuff, the boy should cultivate; at the same time, the teacher should guard him against forming slipshod habits.

It should be remembered that school reading is only an introduction to the world of books. Therefore, the teacher should talk to the boys of what they have read, suggest new poems or new stories in connexion therewith, and tempt the boys by reading choice bits to them,

Every boy must be induced,—the feeling should be voluntary as a result of his appreciation of literature,—to form the nucleus of a library of his own. One's love of literature may be tested by one's own possession of books.

As to the qualifications and material equipment needed of those who have to teach literature, my view is, such a teacher, should be first and foremost an enthusiast, a poet in feeling if not in expression and one who is thoroughly imbued with the literary spirit. Free from fads, with a deep erudition and an intimate acquaintance with almost all that is best in literature, he should instil something of his own infection to his boys. Above all he should have a knowledge of two literatures, his own vernacular literature, for preference, beside the English. Then only will he be able to do justice to his calling. What a wealth of poetic imagery, conceit, poetic insight, is to be found in oriental literatures. One, therefore, acquainted with his own native literature, can bring up parallels, etc., and bring home to the boys the strength and merit of the literary artist. The least sign of dullness on the teachers' part will cast the Upas-shadow on the class.

H. NARASINGA RAO.

THE EDUCATIVE VALUE OF DRAMA.

WHAT constitutes education has been variously defined by experts in times out of number according to their own standpoint of viewing it as a necessary condition for the betterment of humanity. Says Rousseau, "All which we have not at our birth and which we require when grown-up is bestowed on us by Education." And Froebel holds, "The task of education is to assist natural development towards its destined end." And the views of so many others, though they apparently seem to differ in some details, more or less approximate to the same views expressed above. Anyhow there is no gainsaying the fact that education is meant to be an effective means for uplifting man in the ladder of evolution, by enabling him to realise in full the latent potentialities in him. And hence whatever conduces to help him in that direction has decidedly its own educative value. And education is not confined to the four walls of the school premises or college. Nor is its source limited to books. It is the unfolding of all powers with which man is gifted from the cradle to the grave and it is to be sought for greater details, in the more voluminous book of nature. It is enabling oneself to live, think and act what man has done in times past and is likely to do in future in all human probability. Briefly it is a short cut to the depot of wisdom wherein the cream of experience of the whole race is available for any earnest purchaser.

Nothing is so convincingly appealing to the human mind in its reality as that which is done or acted before one's very eyes. It is this sort of perception that is enduring and devoid of vagueness about it. Concretising abstract truths through visualising methods

CLOUD MESSENGER.

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is the easiest way of making even the unthinking minds comprehend facts which would otherwise require much strain of imagination. There is an easiness in the understanding of everything that seems to have a naturalness and a real entity about it. And though man's mind may be operated upon to effect a sense of perception of anything by other ways, the strength of it as left in the mind is, in most cases, not what it ought to be. To the average mind, much imagination is required to supplement so many links in the idea seeming otherwise to be a jumble of irreconcilable bits. Hence the importance of giving a tinge of actuality and naturalness by appealing to the eyes in anything that is presented to the mind for its understanding.

Now to the consideration of what constitutes drama. Drama is the story of human life and action represented by actors imitating the language, dress, etc., of the original characters. It is simply a feigned experience of what some people thought, acted and lived in times past under various circumstances driving them to do what they did. It is nothing other than exhibiting the line of nature's course in human concerns conditioned by special circumstances. It is illustrating the principle that virtue is destined to thrive at all times over vice. In this art, if the actors be experts gifted with the skill of making the audience believe that what they do is no art but a reality by so identifying themselves in entirety in the *personnel* of the original characters, it so happens at times that some of the spectators of average strength of mind are swayed in their emotions and temperaments by the feigned feelings and sentiments of the players and so, for the time being such spectators forget themselves merging their individuality in what goes on on the

stage. This interested diving deep into the very marrow of the play therefore produces an indelible impression of the morale of the story in their minds. Once, we were told, while the play of Harischandra was being staged in some village and the player acting the part of Harischandra was so successful in capturing the minds of those in the box and the pit, a certain influential man of the village who was then one of the spectators, moved at the suffering of Harischandra due to his maltreatment by Visvamitra for ready payment of what was due to him, rushed in a fury up the board and railed at the person in the garb of Visvamitra down rightly asking him how he made bold to take the law in his own hands for non-payment of his dues, while the proper course had been to file a suit against Harischandra in a civil court! Instances are not wanting especially when tragedies are being enacted wherein the on-lookers sympathise with the supposed afflicted character in all the stages of the suffering and this tune of mind properly pitched influences them throughout their lives by making them be more amenable to the poor and the suffering. Nor is it impossible again for some others, among the spectators, of an easy-going turn of mind to be roused in their emotions on the carnal side so as to be ever longing for occasions of allied pleasurable sensations tending to degrade their conceptions of the right. This is entirely due to the undue prominence given to such parts as should be kept within legitimate bounds.

Most of the present day professional actors dwell more on the outward forms of life than go deep into its subtleties, the formative elements of character that go to determine a

man's success or failure in life. For, the success of any art consists in hiding its artificial characteristic. And it is no easy matter to put on the veil of naturalness in a deliberate work of art. It requires above all a correct perception of the actual and the real, the rare gift of some of the fortunate few only. It requires such a fertile imagination as to seemingly identify oneself in toto in the personality of another. In short, one should be an expert in the art of reading nature. Such capability is possible to exist only in the case of those that have widened the horizon of their mental vision from a high standard of education. Now-a-days those that take part in the professional dramatic performances being mostly men whose educational attainments do not so favourably impress them on the minds of the enlightened class, their performances fall far short of the standard of excellence and educative value expected of them. It is however a matter for much encouragement and consolation that attempts are being made in certain quarters to revive the tone and usefulness of this art, by some competent and highly-cultured people with the noble idea of furnishing some model performances for instruction and guidance. If this intellectual re-awakening in the direction of dramatisation on the part of the few should serve as a stimulus to those actually engaged in the profession in the way of giving a naturalness to their plays tending to the elevation of the soul, it is certain that, within a short time to come, the dramatic art will be raised to a high level of excellence to be a useful art to humanity.

So much about enacting the drama. Now, one word in conclusion with regard to the dramatic literature. As in everything else

in the world, in this part of literature too, there are works of the best quality, mediocre worth and inferior stuff. Works of the type of Kalidas and Shakespeare are no doubt the guide posts in the path of progressive knowledge. Hence they may be taken as models for future constructive work in this direction of literature. They represent human nature almost as Nature revealed it. Of the mediocre ones a judicious selection should be made, as otherwise the usefulness arising therefrom will fall far short of the trouble taken in that connexion. And those which are of the inferior stuff are simply the outcome of the struggle between the tendency of the times towards deterioration in the correct perception of man and his possibilities and that of the brightest periods of national activity in intellectual awakening, resulting in the partial victory of the former. To have anything to do with these is to ignore the valuable treasure already in our possession and to try to earn it once over again with much unnecessary toil and without any certainty of success.

T. S. SUNDARAM Aiyar.

Correspondence.

TEPPAKULAM,

Trichinopoly, 23rd October, 1917.

To

THE EDITOR,

"EDUCATIONAL REVIEW," MADRAS.

Dear Sir,

I feel I must thank you for the unfair remarks you have made about my new book "Pre-Mussalman India" in the August 1917 issue of the "Educational Review." I believe you will permit me to offer a few words of explanation.

You say that I question the universally-held theory of the Aryan immigration into India and that I see in the Varnasrama institution and the life-story of Gautama the Buddha the greatest obstacles to that theory. You have here misquoted my words. I say on page vii: "The author dares to ask if the Aryans ever came into India as a conquering race. He knows that the institution of Varnasrama, prevalent among the Aryans from pre-historic times, gives a direct lie to any theory, however well-propounded, that the Aryans are foreigners to India. He also thinks that the European nations, as also the Turks and the Persians, however sincerely particular men may cherish particular pet theories of their own, are not Aryans. The greatest authorities for the Aryan in this respect are his *sacred books* where not an iota of evidence is found to prove that the Aryan ever came into India from a foreign country. And the life-story of Gautama the Buddha—how grossly misrepresented by interested aliens—it hardly passes one's understanding to conceive!"

2. I invite your attention to the italicised words and wish to point out to you that my statement means plainly: "The Aryans never came into India as a conquering race," and that the authorities for my statement are the "Aryans' sacred books." In what Veda, in what Sakta, in what Smriti or Purana, is it said that the Aryan is a foreigner that conquered India? The Europeans remember their own occupation of America and

Australia and think that we too must have done the same. Pray, what logic, please?

On page 2 of the book, I have said: "The Varnasrama Dharma, prevalent among the Aryans from pre-historic times down to the present day, recognised even by western orientalist, makes us question the relevancy of this theory."—

3. [The theory of the Aryan immigration.] Supposing for a moment that the Aryan, like the European into Australia and America, had come into India and waged a successful war of extermination against the aborigines, would there have come into existence this system of Varnasrama? In countries conquered and occupied by the Europeans, does any system exist to-day analogous even in the merest outline to the Aryan system of Varnasrama? Why should I not say that the Varnasrama institution is the greatest obstacle to the theory of Aryan immigration?

4. I continue on page 2: "The civilisation of the ancient Aryans, their system of government, their peaceful pursuits, their agricultural operations, their industrial arts, their righteous wars, and above all, their religion, as proved by the sacred books of the Hindus and by the political division of Aryavarta into the 56 kingdoms of yore, go clearly to prove that, from pre-historic times, the Aryans have been living on the banks of the Sindhu and the Ganga. And Afghanistan was a portion of ancient India."

It will thus be seen that I dare to question the relevancy of the Aryan immigration theory on the authority of the Hindu sacred books and that I have written enough to support my assumption. I have not failed to fulfil any promise made anywhere to anybody.

5. Regarding the life-story of Gautama the Buddha, I have not said anywhere in the book that Buddha's life proves the lie to the Aryan immigration theory. I have simply said that Buddha's life and gospel are grossly misrepresented by interested aliens. I direct your attention to the life of Buddha in existing histories and to the statements in my book on pages 20 to 31.

6. With regard to the reviewer's other remarks,

viz., "the author should have studied Indian history instead of writing a book upon it every chapter is defective and meagre; technical terms are abruptly introduced without any explanations or previous references, and the young boy is likely to be more perplexed than informed; a glance at Chapter XVIII on the Minor Hindu Kingdoms alone will be sufficient to show that more systematic treatment should be placed in the hands of boys;" please permit me to say that these are sweeping statements and require ample proof before they could find their way in public print. Since the above remarks appeared, I have closely studied Chapter XVIII and find therein absolutely nothing to prove that the treatment is not systematic. I believe that the chapter is necessarily incomplete and I have said so on page 87 in the footnote. If the reviewer had, instead of thus stabbing the author in the dark, devoted a few pages for a very minute study of the book rather than 21 lines each 2½ inches long in small pica, and shown upon detailed examination that the book was faulty, the author would have been very much pleased and withdrawn the book from circulation and repaid every purchaser. The reviewer has unnecessarily maligned the fair name of the author, forgetting that even if the book were faulty, the author as a teacher should be encouraged by constructive criticism in an educational magazine and not be condemned.

7. I wish to direct the reviewer's attention to a few words of wisdom written by philosopher Schopenhauer in his Parerga. "The literary journals should act as a dam against the unconscionable ink-slinging of these days. Is there one that conscientiously reviews books because of their importance?"

Finally to convince the reviewer that the book is not really so bad as it is reviewed to be, permit me to express one out of several opinions the book has been able to obtain.

"It is written purposely to emphasise the more salient and permanent features of the Indian civilisation eschewing all objectionable and doubtful matter. The author has made an honest

attempt to inculcate ancient Indian ideals of society and government."—*The Hindu, Madras.*

I remain,

Dear Sir,

Yours sincerely,

M. S. NATESON,

Teacher, Hindu Secondary School.

Reply by the Original Reviewer.

1. The author has charged me with maligning him. I assure him that I had no such intention. I do not know him, nor does he know me. My judgment was based on the book and if the criticism was severe it was because, in my view, it was what it deserved. There is no personal feeling in the matter. A reviewer has often to say plain things and if he does not do so he will not be true to his duty.

2. He says that my interpretation of his statement regarding the Aryan advent and Gautama's connection with it is incorrect. He has quoted the passage itself, and the public can judge whether my interpretation is an unjust one.

3. The author argues that the conquest of Australia, America, etc., by Europeans has not been followed by the institution of the Varnasrama-dharma in those areas, and the existence of the institution in India is a proof against the theory of conquest. Every reader of current politics, of affairs in America, Australia and Africa, will see the hollowness of the argument. There may not be Varnasrama-dharma in the very form in which it is in India; but the idea of caste, though not in theory, exists in full force in fact. The whole political problem in these continents is the problem of conflict between the conquerors and conquered, between different races.

4. I fail to see how these facts can go to prove the author's contention. The political

division of India into 56 kingdoms is practically mythical. It is moreover very, very late,—in fact after the Vijayanagar period. It can be hardly given as an argument in favour of the indigenous theory regarding Aryans.

5. With regard to this, I appeal to any reader to read the passage given by the author himself and see whether I have been wrong in connecting the Buddha with alien conquerors. He however says that he does not mean what his book, in my view, says, and we may be glad of it.

6. I am really sorry for my remark that the author should have studied Indian History instead of writing a book upon it; I cling to my other remarks. For examples of defective treatment, see Ch. II, X, and XVIII (where kingdoms of great importance are dismissed in three or four lines). For abrupt mention of technical words without explanations or previous references see *Samhitas*, *Aranyakas*, *Smritis* (p. 6); *Karma* and *Avatāra* on p. 15; 'Advaitic basis of Vedic ritualism' on p. 22; Upanishads and Sūtras (ib.); Yōga and Sāṅkhya in p. 28; Nīrvāṇa in p. 29; etc. I appeal to the world of teachers to tell me whether students will be able to understand the meanings of these terms without any explanation. I have myself been a teacher lecturing on Indian History for years and I have felt the necessity of explanatory treatment even in the B.A. classes.

7. The anonymity is not due to me. It is evidently due to the uniform policy pursued by the Editor.

V. RANGACHARIAR, M.A., L.T.,
Asst. Prof. of History, Presidency College.

NANDAN.*

During these days when bringing out cheap novels in adaptation of English originals, is of every-day happening, a publication as the one of this kind is seen in relief and healthy contrast. This story of Nandan, told in easy faultless prose, is an old story that cannot fail to fascinate any mind. A reiteration of the well-known story, even in brief, here is needless. As for the style and purpose even a cursory perusal of its pages is sufficient to impress one with its chastity of diction and free flow of its sentences; and no one can miss its purpose as from beginning to end the publication breathes the free air of devotion to God implanted in any and every mind, be it of the meanest or of the richest person on earth. The devotion to his God of the Pariah saint here in this story, can point to only one moral; and that is the inevitableness of this glorious virtue of devotion to one's God, gracing the hearts of every Human Being irrespective of the quality of the social environments amidst which such a Being may be placed. This publication richly deserves to be prescribed as a suitable text-book for non-detailed study in High schools both in consideration of its style and ideas.

T. K. SATAGOPACHARYA.

* *Nandan*—in easy Tamil Prose—by T. A. Gōpālasvāmi Aiyāṅgār and T. G. Ārāvamūda Aiyāṅgār, M.A. (Madras: Srinivasa Varadachari & Co.) Crown. 124 pp. 10 as.

UNIVERSITY OF ALLAHABAD.

ANNUAL MEETING OF SENATE.

The annual meeting of the Senate of the Allahabad University was held on Friday, the 9th instant, in the Senate Hall, the Hon. Justice Sir Pramoda Charan Banerji, Vice-Chancellor of the University, presiding. About 55 Fellows were present.

TRIBUTE TO DECEASED MEMBERS.

The Hon'ble the Vice-Chancellor proposed the following resolution:—

'That the Senate do place on record its deep sense of regret at the loss it has sustained by reason of the death of Dr. Hill, Mr. Syed Karamat Hussian and Mr. Gardner Brown who rendered very valuable services to the University during the time they were Fellows of the University.'

The Hon. Sir Henry Richards seconded the resolution and it was carried.

On the motion of Rai Bahadur Gyanendra Nath Chakravarty, Mr. Mackenzie of the Allahabad Training College was nominated as the University representative on the Allahabad Municipal Board in place of the late Dr. E. G. Hill.

After disposing of some formal items on the agenda, the Senate proceeded to discuss the resolutions of which notice had been given by several Fellows.

The Hon. Mirza Samiullah Beg's resolution relating to examinations by compartments was postponed to the March meeting, as the mover said, that in view of the fact that the matter was being considered by the University authorities, he wanted that the resolution should be postponed.

IMPROVEMENTS IN THE MATRICULATION EXAMINATION.

Pandit Iqbal Narain Gurtu moved the following resolution:—

'That the Senate considers it desirable to introduce the following improvements in the Matriculation examination:—(a) Oral and practical tests of candidates should be introduced along with the written examination in such subjects in which they may be desirable; (b) A record of all practical and written work done by students in the class-room must be kept and produced for the inspection of the examiner or such other officers as may be authorized by the

University, and the headmasters be asked to give their opinions as to the abilities of candidates sent up from their schools. The question and answer-books of candidates at terminal examinations of the schools must also be produced for reference; and a Committee consisting of the following members be appointed to report about such changes in the conduct of the Matriculation examination and its courses as may be necessary to carry out the principles laid down above—The Director of Public Instruction, U. P., the Director of Public Instruction, O. P., the Hon. Mirza Samiullah Beg, Mr. A.H. Mackenzie, Mr. M. B. Cameron, Pandit Manoharlal Zutshi, Rai Bahadur G. N. Chakravarty, Mr. W. Jesse, Mirza Habib Husain Khan Bahadur, Mr. V. B. Pandit, and the mover.'

Mr. Gurtu said that he based the first part of his proposal mainly on three grounds: First, the method of examination that would be introduced in case the proposal was accepted, would improve the method of teaching in schools. Secondly, the difficulty, which some students who passed the Matriculation examination experienced, at present in getting Government employment by reason of the fact that they were not considered quite suitable for it, would be removed. Thirdly, they were told on high authority that a similar system of examination which was in vogue in these provinces was very popular. With regard to the first, the educational point of view, he submitted that it was the opinion of educational experts, of Professors and Principals of Colleges, and of the Director of Public Instruction, that the proposed system of examination was the best and had produced very satisfactory results. The Director of Public Instruction, U. P., in his report for 1916, said that the really better schools now took to the S.L.C. examination, while the weaker ones clung to the Matriculation examination. Then he (the Director) quoted the opinion of the Inspector of Schools of the Benares Division who in describing the effect produced by the S. L. C. examination said that the improvement effected in the method of teaching as also of examination by the introduction of the S.L.C. examination was at last beginning to find weight both with the boys and their parents, with the result that it was growing in popularity every day. A number of schools, said the Inspector, which used to

argument of the mover about entry into Government service. He could not subscribe to the view that the University should take any steps which would enable its candidates to enter Government service. He looked forward to the day when Government would institute its own examinations to select candidates for Government service. The expenditure incurred in conducting the S. L. C. examination in the U. P. was over Rs. 20,000; and when they remembered that this University catered not only for the U. P. but Rajputana, the Central Provinces, Ajmer and Central India, they could form an idea of the expenditure they would have to incur if the proposal was accepted. The essence of the S. L. C. was that the examination should be held in the school where the boy was educated so that the examiner might be acquainted with the methods of teaching in the school. If the examiners had to go to the various schools, the expenditure which the University would have to incur would be between Rs. 50,000 and a lakh. If the proposal was at all adopted, he hoped it would be accepted with the reservation that the whole question should be referred to the Finance Committee.

Prof. Ward said that if the proposal were accepted the cost would be considerably over Rs. 50,000. He dwelt on the nature of the Matriculation test and said that it should not be regarded as the final school test.

Mr. Cameron said that very considerable difficulty had been experienced at present in getting competent examiners to do the work of S. L. C. examination. It was not possible to draw upon the staff of the Colleges any further than at present. The mover drew a very pleasing picture of the profits of the University. *Mr. Cameron* wondered where all those profits were for, whenever they asked the Finance Committee to give money, they gravely shook their heads. The University was not in a position to be generous.

The Hon. Mirza Samiullah Beg said that it had been pointed out that University education should not be subordinated to considerations of service. But it was impossible for them to disregard such considerations. It should be the duty of the University to improve the examination and make it useful. It should try to remove the objections raised to its

test. As regards the financial question, they might appoint a Committee to go into the matter.

Dr. Ganesh Prasad said that the gentlemen who opposed the proposal, would admit that it was a desirable one inasmuch as it would result in an improvement of the Matriculation examination. Some of them opposed it on the ground of expense. The expenses of conducting the Matriculation examination increased during the last few years owing to the rise in the price of paper, etc. But when the normal circumstances returned, the expenses would decrease and this would be a substantial saving from the fee-income. He urged that they should try to improve the Matriculation examination. As regards the question of cost it might be referred to a Committee if they accepted the principle of the resolution.

The Hon. Dr. Tej Bahadur Sapru said that in discussing this question there were two issues which ought to be borne in mind. The first was whether the scheme which had been put forward by Mr. Gurtu was educationally sound. The second was whether it was practical. As regards the first, everyone of the critics of Mr. Gurtu's proposal claimed greater merit for the S. L. C. examination than for the Matriculation examination. Indeed it was admitted that the S. L. C. was much more efficient than the Matriculation, as the former took into account the record of the work of students during the whole course. So far as the second issue was concerned he thought they were too much in a hurry. It raised questions of great difficulty, and an assembly of that character should not dispose of a large question like that. The proper course would be to refer the matter to a Select Committee or to the Finance Committee. It seemed to him that the whole fight about this matter was a sham fight as the real issue was a different issue, an issue of greater importance than these two issues. It was on that issue that the University had to make up its mind. That issue was—Were they going to allow the Matriculation examination to be killed merely because it had been weak so far? If the Matriculation was to continue it must be conducted on proper lines. Otherwise they themselves were courting its death. If they thought that it was better to get rid of Matriculation, then let them say so plainly, let them not beat about the bush. Personally speaking he had absolutely no prejudice against

the S. L. C. On educational grounds he considered that the system on which the S. L. C. examination was conducted was far better than the system on which the Matriculation examination was conducted. In the S. L. C. examination the examiner came into direct contact with the examinees. Why should they not make the necessary changes in the Matriculation which would enable it to live?

The Hon. Pandit Gokaran Nath Misra said that he endorsed every word uttered by the Hon. Dr. Sapru. From his experience he could say that every year schools had to close Matriculation classes and open S. L. C. classes because the former were not popular. If they went to Government and asked them to recognize the Matriculation as equivalent to the S. L. C. for purposes of Government service they would be told that the S. L. C. was superior to Matriculation and they would not recognise the latter as a test for entry into Government service. In these circumstances if the Matriculation were not placed on a sound basis it would have to go away, in a few years. He moved an amendment to the effect that after the words 'about such changes in' the following words be added:—'the examination fees and.'

Rai Bahadur Gokul Prasad said that he had served on the Committee which gave birth to the S. L. C. examination. One of the grounds on which he opposed at the time the introduction of the S. L. C. was that it would ultimately lead to the death of the Matriculation examination because it would be patronized by Government. So far the number of Matriculation candidates had not gone down: but the real question, as Dr. Sapru pointed out, was whether they as the University were prepared to allow the Matriculation examination to go to the wall. As far as the merits of the two examinations were concerned they were all agreed that the S. L. C. examination made a man better fitted for work in life. It was the duty of the University to make its own examination as good as, if not better than, the S. L. C. examination.

Prof. Rushbrook Williams said that the practice of modern Universities on the continent as well as the older Universities of Oxford and Cambridge was to deprecate the imposition by the University of any formal test for admission to its portals and he did

not think they need be scared by the bogey of possible vanishing of Matriculation in the face of competition with S. L. C.

Mr. Hide said that he hoped that the forming of the proposed Committee would be the beginning of the introduction of an examination which would be so different from the S. L. C. examination that parents and headmasters would think very seriously before they decided to send any boy to the University. Boys should not go up to the entrance examination of the University in the careless and happy-go-lucky way in which they did at present. If a boy in future meant to go to the University he should go there in pursuit of knowledge and not in pursuit of rupees. The present Matriculation examination was admittedly a failure and he hoped that the Committee would be able to frame some kind of programme so that in the course of the next few years they might have an examination which would lift the schoolmasters and boys out of the narrow grooves into which the present examination had drawn them.

Mr. Burrell said that they met that day for the transaction of business, but he thought that they were not following their object in spending about one and a half hours in discussing a purely Utopian scheme. They should come back from the world of imagination to the world of realities and they moved in the world of realities when they kept themselves very closely to the question of finance. He had something to do with the S. L. C. examination when it was started and he could say that the cost of the examination at the time of its initiation was more than what the mover of the resolution estimated. They had to look at the question from the point of view of Rs. as ps. In view however of the fact that there was a strong desire to have this matter examined by a Committee he thought it would be a good compromise if the proposal was examined in the first instance by the Finance Committee of the University. The University had to appoint a good many Committees to transact its business and he did not think it was desirable that they should appoint Committees unnecessarily to consider Utopian schemes. First let the financial aspect of the proposal be examined and then they would know whether it would be practicable or not.

The mover in his reply accepted Pandit Gokaran Nath's amendment and referred to the various points raised in the discussion. He said that he did not say that his proposal would not result in

increased expenditure. All that he said was that the present income from examination fees would suffice, but if the Finance-Committee or any other Committee thought that that amount would not be sufficient, they could consider the question of increasing the examination fees. Then it was said that the examining agency would not be adequate. He had anticipated that objection in his opening speech. There was a large staff in the various Colleges and they could make use of that staff. Then it had been said that the object of the two examinations, S. L. C. and Matriculation, were very different. The one prepared boys to earn a livelihood, while the other was meant only to give them literary education. He questioned the soundness of the proposition that the University should only concern itself with giving literary education and no more. This question had been discussed in the West and the best educational opinion inclined to the view that University education should be of such a nature as would not only give a literary education to the boys, but would fit them for life. Therefore this University could not say that they should not take that side of the question into consideration. He referred to other points raised in the debate and said that if the University wanted the Matriculation examination to continue, it should conduct it on efficient lines. His proposal was not only practical but eminently desirable.

The resolution was put to the vote and lost, 14 voting for and 19 against it.

INCREASE IN THE NUMBER OF FELLOWS.

Pandit Iqbal Narain Gurtu next moved :—

'That the Senate is of opinion that the growing educational needs of the Allahabad University require that the number of its ordinary Fellows should be raised to a maximum of one hundred; and of such number one-fourth should be elected by registered graduates, one-fourth by the Senate, one-fourth by the Faculties and one-fourth to be nominated by the Chancellor.'

The *Vice-Chancellor* said that a recommendation was made by the Local Government to the Government of India to raise the number of Fellows, but the latter vetoed the recommendation. He did not know whether in those circumstances any purpose would be served by discussing the proposal.

The *Hon. Dr. Sapru* said that at the last meeting of the Imperial Council in reply to a question on the subject the Education Member said that the whole matter of revision of the Indian Universities

Act was before the Government of India and that this matter would also be considered then. He therefore thought there was no advantage in discussing the proposal now.

Mr. Gurtu said that under the statute the University could have only 75 Fellows. Since that Act was passed two more Faculties were constituted and the number might increase in future. So they should ask for an increase in the number of Fellows. Out of these 75 Fellows at present, 60 were nominated by the Chancellor and 10 elected. His proposal was that 3/4 of the members proposed should be elected. The proposal might appear revolutionary in character but the principle underlying it had been accepted by the Government of India in the constitution of the Patna University and by the Committee recently appointed by the Senate of the Bombay University to go into the question. He was not particular about the details; his only object was that sufficient scope should be given to the teaching staff to be on the University.

The *Hon. Pandit Gokaran Nath Misra* seconded the proposal.

Rai Bahadur G. N. Chakravarty suggested that the whole matter be referred to a Committee as was done by the Bombay University.

Mr. Gurtu said that he would accept the suggestion if the main point of the proposal, viz., that 3/4 of the members should be elected, was accepted.

Rai Bahadur G. N. Chakravarty said that they might leave that to the Committee and it might be stated that it was his opinion that 3/4 of the members should be elected. He then moved the following amendment :—'That the Senate is of opinion that the growing educational needs of the Allahabad University require that the number of ordinary Fellows should be raised to a maximum of 100 and that the details of the constitution of the Senate be referred to a Committee consisting of the following gentlemen :—The *Hon. Mr. de la Fosse* (convenor), the *Hon. Sir Sundar Lal*, the *Hon. Dr. Sapru*, the *Hon. Mirza Samiullah Beg*, *Mr. Spence*, *Prof. Ward*, *Mr. Mackenzie*, *Rev. A. W. Davies*, *Pandit Iqbal Narain Gurtu*, *Dr. Wali Muhammad*, *Mr. Jesse* and *Rai Bahadur G. N. Chakravarty*.'

The mover accepted the amendment. It was carried.

QUALIFICATIONS FOR MEDICAL STUDIES.

Mr. Said-uz-zafar Khan moved a resolution to the effect that a candidate might be admitted to the

medical studies if he produced evidence which would satisfy the Syndicate that he possessed the requisite qualifications. He said that at present a student should pass the P. Sc. examination before he was admitted to the Medical College. Suppose a student appeared at the B. Sc. examination and failed in all subjects except Chemistry. For purposes of the Medical College that student possessed the required qualifications and they saw no reason why he should not be admitted to the College. He proposed that the following examples be added as footnotes :—

(1) A B. Sc. candidate, who has passed in Chemistry, but failed in other subjects, may be considered to possess the qualification equivalent to the Preliminary Scientific test provided he passed Intermediate with Biology.

(2) A student of the Calcutta University, who has failed in Anatomy, Physiology, and Pharmacology in the 1st M. B. examination, but has passed in Organic Chemistry, may be considered eligible to appear for this examination, provided he fulfils the other conditions.

The proposal was accepted. The meeting then dispersed.—*The Leader*.

PROPOSED REORGANIZATION OF THE INDIAN EDUCATIONAL DEPARTMENT.

OPINIONS OF LOCAL GOVERNMENTS INVITED.

The Government of India addressed a long communication to Local Governments on the recommendations of the Public Services Commission's report in respect of Indian Educational and Provincial Educational Services. The Government of India do not propose in this communication to deal with the questions of leave or pension as these must be decided largely in accordance with the principles adopted for other services, nor is it proposed to touch, for the present, on the service for women which the Commissioners have recommended. The Subordinate Educational Service again was not included in the scope of the Commission's enquiries. The present reference is intended to deal with the main features of the constitution of the Department qua 'Indian' and the 'Provincial' services though it will be open to Local Governments to make suggestions regarding any of the further detailed

recommendations of the Commission bearing on these main features. The object of the Government of India at the present stage is to obtain the views of Local Governments at the earliest possible date in respect of the fundamental principle on which the Department should be reorganized. The recommendations of the Commission on this subject are summarized in paragraph 36 of their annexure 4 and the present communication is concerned mainly with Nos. (1), (8), (10) and (18) of the recommendations as there summarized.

Apart from a certain number of miscellaneous appointments outside the cadre, the existing Department consists of two branches, the Collegiate and the Administrative, and transfers from one of these branches to the other are fairly frequent in some provinces but rare in others. The higher branch of the Department again consists of two services, the Indian Educational Service and the Provincial Educational Service which are nominally parallel to each other but in practice, at any rate so far as pay is concerned, are quite unequal. The former service is recruited in England and consists almost entirely of Europeans who draw a salary rising from Rs. 500 to Rs. 1,000 per mensem with certain additional allowances. The latter service is recruited in India and its members draw as a rule a graded pay varying between Rs. 200 and Rs. 700. Proposals for the reorganization of these services may be framed either in the way adopted by the Commission, though not necessarily in close accord with their specific proposals, or on alternative lines such as are suggested before. The Governor-General in Council desires that Local Governments will take into their consideration both these alternative proposals and favour him with their opinion upon them. The proposals made by the Commission are explained in annexure 4 of their report and need not be repeated here in detail. The Commission adhere to the present distinction between the collegiate and administrative branches but they desire that transfers from one to the other should not be permitted except under sanction of Government and to meet the public interest.

Moreover in addition to the main cadre of the Education Department to which reference will presently be made, they recommend the organization of (a) a body of 20 Professors recruited either in England or in India, and (b) special recruitment to certain posts which would otherwise fall under Class 2. As regards the former, it will be noticed that

the Commission attached considerable importance to this portion of their scheme as representing a basis for building up a system of higher studies and original research but they found great difficulty in deciding the relationship of these posts with the existing system of affiliating Universities. They suggested, therefore, that these posts might be attached to (a) Government Colleges or (b) the affiliated Universities along the lines now attempted by the Universities of Calcutta, Madras and Allahabad or (c) a post-graduate institute of research. These proposals are open to obvious criticisms. For example, a Government College Professor is and must be insufficiently in contact with other Colleges to be able to influence the higher teaching of the University as a whole. Again, a Professor of an affiliating University is almost entirely out of touch with the main stream of College work and also finds it difficult to conduct research work with students whose past training he has been unable to influence or to guide, and a research institute of the character contemplated by the Public Services Commission is impossible of early realization. It might also be urged that the proposed body of the higher Professors will tend to debase the position of the ordinary College Professor whose duties are possibly of even greater importance and difficulty than those of the former. The Government of India are however in agreement with the Commission in thinking that there is a real need for a body of specialists in the several departments of study who would improve the methods of instruction in Colleges and the courses of study in the Universities and would also inculcate a spirit of research, especially in those subjects termed 'orientalia' in which India should take a leading part. It will probably be more convenient to consider at a later date the constitution of the class of posts and the method in which they should be brought into being, but it is impossible to neglect altogether this issue in the present reference. So, too, as regards the other special posts referred to in para 3 of annexure 4.

It will probably be necessary, under any form of organization, to make provision for a class of appointment outside the cadre as is indeed done under present arrangements. The Government of India do not ask for any detailed proposals regarding the exact number of posts which should be included in this class. If, however, any special posts of importance should be so included to which the Commission have not referred, it is hoped that Local Governments will

specify the character of such posts. Outside the subsidiary but important matters to which reference has been made the main proposals of the Commission will result in the amalgamation of the Indian Educational Service and the Provincial Educational Service and, after this amalgamation has been effected, in a division into class 1 and class 2 the distinction between which should be based on the type of work to be performed by each officer. The manner in which this distinction could be carried out is indicated with a certain amount of detail in paragraphs 5 and 6 of annexure 4. The new class 1 proposed by the Commission is designed to consist in the first place of 264 appointments, including (a) the present Indian Educational Service comprising 199 posts whose incumbents would be transferred *en bloc* to the new class 1 and (b) posts equal to about one-third of the number to be filled by persons recruited in India either directly or by promotion from the Provincial Service. Regarding future recruitment to these 264 posts it is recommended in para. 2 of the annexure that the present proportions of recruits obtained in Europe and India respectively, which would under the adjustment above indicated amount roughly to 3 to 1, should be maintained in the future for the existing number of posts taken as a whole on the understanding that if no candidate from Europe of sufficient merit for any particular vacancy, which would ordinarily be filled in Europe is available, there should be no hesitation in making the appointment for that occasion only in India, provided that a better candidate were forthcoming. It is also recommended that additional posts which may be found necessary hereafter should be filled half by men trained in one country and half by men trained in the other. In this way it was expected that the percentage of the service recruited in India would gradually increase, while that taken from Europe would diminish in proportion. On the administrative side, half of the class 1 posts to be filled up in India are to be reserved for direct recruits and half given to class 2 officers provided qualified candidates are available. On the collegiate side, the proportion is to be two-thirds and one-thirds respectively (para. 15 of annexure). Class 2 is to be as large as the work to be done requires (para. 7) and recruitment for it is to be entirely in India (para. 12). The proportion of class 2 posts which is to be filled by promotion from the subordinate service is left to be determined by the local authorities (para. 13),

It is proposed by the Commission that both classes should be paid on an incremental scale (para. 21). For officers who are recruited in India a general scale of Rs. 350—50—1,250 a month is recommended, whilst for those who are recruited in Europe, whether statutory natives of India or not the Commission propose a salary of Rs. 550—50—1,250 a month. This would bring all officers irrespective of any selection to equal grades of pay after 18 years' service at the latest (para. 22). The Commission also provide for selection grades for all alike wherever recruited and whether statutory natives of India or not of 10 per cent. of the cadre on Rs. 1,250—50—1,500 and of a further 10 per cent. on Rs. 1,500—50—1,750 a month in all the major provinces except Assam.

For class 2 the same general scale is proposed as had been recommended for the Provincial Civil and Police Services and other such services which are recruited in India. This would give a scale for all provinces exclusive of Burma where a special scale is proposed of Rs. 250—40/3—450—50/3—500 a month for the main body of officers with selection grades of Rs. 500—40—700 a month for 15 per cent. of the total cadre (para. 22). These changes are estimated to involve an additional cost of over 9 lakhs per annum (para. 23.)

Such are the main features of the organization proposed by the Commission and the Government of India would be glad to receive the comments of Local Governments on the advisability or otherwise of following the principles laid down. It is desired that special consideration be given to the following points:—(a) Whether a distinction between class 1 and class 2 can, in practice, be made according to the work done in the manner suggested by the Commission, and whether the scales of pay proposed for the two classes are suitable. (b) In this connection special attention should be given to the proposed differentiation in pay between the members of class 1 recruited in England and in India respectively and to the general considerations put forward in para. 55 of the report. In other words, is there to be a distinction of pay in class 1, e.g., according as its members are recruited in England or in India, or should all officials of this class draw the same pay? In the event of there

being a distinction of pay between officers who are deemed to possess European qualifications and others, should Indians be admitted to the former category merely on the ground that they happen to be in Europe when recruited, or should there be a condition that Indian officers deemed to possess European qualifications should have received education in Europe for a specified number of years?

The Government of India desire that the Commission's scheme should be examined as above suggested but they recognize that it appears open to criticism in various respects of which the following appear to be some of the most important:—(a) The Public Services Commission of 1886-7 were of opinion that the recruitment of educational officers in England should be confined, as far as possible, to Principalships of Colleges and Professorships in those branches of learning in which European standards of knowledge had been reached in India. Officers so recruited in England were to receive a scale of remuneration based on the attainments required and the duties to be performed. It has been represented that these proposals have not been carried out. The fact that at the time of the present Commission's enquiry there were only 6 Indians in a service of 199 members tends to support this contention.

Instances are adduced of Indian officers of distinction who have been unable to obtain admission to the Indian Educational Service, and on the other hand attention has been drawn to the alleged inferiority of many of the officers recently appointed in Europe to the service. By allotting one quarter of the new class 1 posts to members of the present Provincial Educational Service or others recruited in India, by giving some definite opportunities for promotion in the future to men of proved merit in class 2 and by insisting that for the posts for which recruitment will be made in England, Indians, trained in that country, will be eligible, the Commission have attempted to remedy the defects of the old system. While it may be hoped that with the improved conditions of service, a better type of candidates for the class 1 posts will be forthcoming than in the past, the question is, however, whether the Commission's proposals are sufficiently effective and one point that needs

special consideration is that referred to in para. 9 (a) above.

It may often be desirable that the teaching of the junior classes in College should be conducted by the more experienced and competent officers. It does not, therefore, follow that participation in the higher teaching is a claim to inclusion in class. It is in connection with problems of this sort that the opinions of Local Governments will be specially valuable and the Governor-General in Council hopes that they will be able to suggest some practical means of distinction between class 1 and class 2 which will not depend primarily upon racial grounds.

(b) Critics of the new proposals may again contend that the main bulk of the educational work in this country should be discharged by Indians serving on Indian rates of pay and that its guidance and control should be very largely in their hands. 'Europeans' they would argue, 'however experienced or scholarly are unable to understand adequately the needs of Indian students or to enter into their lives with sufficient intimacy or sympathy.' Such critics would, therefore, urge that instead of placing the Education Department as suggested by the Commission in that group of services in which a mixture of East and West is desirable, it should be included in the third of the categories described in para. 32 of the Commission's report. On the other hand it may be maintained that while the bulk of the educational service in India should ultimately be manned by Indians recruited in this country and that a knowledge of the minds and habits of the people may be of more value than European training this contention is under the present conditions true only up to a certain point. A uniform service working under Indian rates of pay might reach only a dull level of mediocrity.

It seems essential at the present moment to attract the best possible material, European as well as Indian, into educational employ on the scholastic side. The establishment of some 20 research professorships could do little to raise the general level of University teaching especially under the affiliating system. For the present, therefore, until the new type of unitary or teaching Universities has been more generally evolved in India, it seems necessary to give more scope to the capacity of efficient College Professors.

Similarly on the administrative side provision ought, it is urged, to be made for western capacity and experience. Even if it were accepted that this

branch of the service should in the main be organized upon lines primarily contemplating an Indian staff it appears important to pitch the salaries of some of the more influential and responsible posts on a scale which will attract really able men, whether Indian or European.

(c) A further criticism of the proposals is that they are not adapted to the general trend of Indian educational policy, at any rate in the region of higher education. The progress of the Indian Universities in the matter of higher teaching both in the number of students attending the classes and in the specialized nature of the courses demands more and more assistance of highly specialised scholars and a certain measure of concentration of institutions. In para. 45 of their Educational Resolution of 1913 the Government of India declared their preference for the teaching as distinguished from the affiliating University. The proposals of the Dacca and Central Provinces Universities Committees, the Patna University Scheme now under consideration and the recent changes made in Calcutta for post-graduate teaching are all in the direction of increased University control over certain forms of teaching and of a certain measure of concentration. Should this line of policy be developed in future and be extended to other parts of India, it is urged that the establishment of a Government service with a regular condition of pay, prospects, promotions and transfers will not be consistent with the needs and requirements either of the new unitary and teaching Universities or of reformed affiliating Universities. If Universities are to conduct certain forms of teaching they should do so through the agency of their own professors and not through the members of an outside service. There seems, therefore, some need for re-adjusting the present proposals to suit such future possibilities. It is true that there are many difficulties in the way of the fulfilment of such a policy, but it would be unwise to embarrass its development by the reconstruction of the Educational Services on lines ill-adapted to the requirements of the Universities of the future.

(d) It has also been suggested that the line of distinction between the administrative and professorial sides of the service should be drawn even more clearly and decisively than has been done by the Commission. Transfers between the two have evoked a certain amount of criticism in the past and under any circumstances are open to some objection. There is to-day an increasing need for specialized knowledge which a man who has been an Inspector for some years cannot hope to have retained. Again a Professor can scarcely hope to attain the necessary intimacy with the Indian system of administration and practice which is required from a successful educational administrator. On the other hand, it may be urged that

it is undesirable to have too rigid a line of distinction that the men in the higher administrative posts would be the better for having had some actual experience of teaching in India and that Professors would profit by having had some experience of administrative work.

(e) It may be contended also that the proposals are rather too rigid and that too little scope is given for the employment of men of experience or of ripe scholarship from outside for short periods of time. Indian University education needs at times the services of men who have already achieved some distinction in scholarship or some experience of educational administration in other countries. In setting out the above criticism the Government of India must not be deemed to be prejudging the issue of the matter. Their present object is merely to clarify these scores to assist in obtaining the well considered opinion of Local Governments. The same remarks apply to the alternative suggestions which follow which are intended to elucidate opinion and not to forestall it nor, in so far as they may prove acceptable, are they necessarily intended for immediate adoption but rather to indicate what may reasonably be accepted as the main policy of future development. For without a definite goal in view, it is impossible to devise any satisfactory scheme for the reorganization of the Educational Services.

If as has already been suggested in para. 6 of this letter that a certain number of posts of the Indian Educational service should be turned into special appointments in accordance with the Commission's proposals, a number of posts roughly equivalent to one-third of the Indian Educational Service (reduced by the exclusion of special appointments) would be added and filled in India. It might be considered whether a larger proportion of Indians might not at once obtain by the addition of the transfer of the posts in the Indian Educational Service now vacant owing to the war and other causes (some 37 in number) to that portion of class 1 which will be recruited in India either by direct recruitment or by promotion. If this were done taking into account on the one hand the reduction in the cadre by the special appointment of a Research Professor and the probability on the other hand, that a considerably larger number of Indians will be appointed in England by the Secretary of State from among those educated in that country, the Indian element in class 1 would at the outset more nearly approximate to the European. The Government of India, therefore, would be glad to hear from Local Governments—(a) whether in their opinion it would be possible to obtain from the Provincial Educational Service or by

direct recruitment so large a number of suitable Indians in this country, and (b) whether it would be to the interest of Indian education immediately to fix the proportion of Europeans and Indians at half and half.

In order to prepare the way for a larger recruitment of Indians than is provided for by the Commission, it would also be necessary to fix a scale of pay which could easily be adapted to such altered circumstances in the future, for it would be a matter of great difficulty to reduce the scale of salaries after the proportion of officers has become very largely Indian. For class 1, therefore the pay on the analogy of that recommended by the Commission, for services requiring high initial qualifications, viz., Rs. 300-50-2,500; 50-1,050, might be accepted, subject to the grant of special allowances for posts of special importance. There might also be a special allowance of Rs. 200 a month for officers recruited in Europe which should be given also to those few Indians now serving in the Indian Educational Service on full rates of pay. Selection grades would be created as proposed by the Commission and would be open to members of class 1 whether recruited in England or in India.

In view of the difficulties referred to in para. 5 above it might be better to hold the 20 Professorships in abeyance—at any rate for the present—a course which would make it the more desirable to accept the Commission's proposals regarding the selection grades. Should, however, the constitution of unitary and teaching Universities become the general policy in the future, it would probably be the best course to transfer a number of posts from the selection grades of class 1 to the establishments of these Universities. It would be premature at present, to discuss how and by whom appointments would be made to these new posts, but recruitment would no doubt occasionally be from the ranks of class 1 of the Government service provided it were possible to find applicants with the necessary specialized qualifications. Such appointments would give a certain number of officers more favourable opportunities for teaching and research than they can under the existing system. Similarly in reference to the administrative side (*vide* para. 10-*b* *ante*) it may be considered advisable by Local Governments to treat the Directorship of Public Instruction in the manner proposed in para. 26 of annexure 4 to the Commission's report. It might also be considered whether a certain number of the posts which would ordinarily be included in class should not be removed from the cadre and left open to be filled by any persons who appear to be peculiarly fitted to discharge the duties attached to them with the addition to the ordinary salary of such allowance as

seemed called for by the qualifications and experience of the person specially selected. In other words, special need may arise from time to time for securing the highest possible talent to fill some of the posts in the Educational Service such as a particular Inspectorship, or the Principalship of an important College or the Headmaster-ship of a certain High School. There should, in such cases, be a certain latitude of selection which would afford to Local Governments the scope necessary for securing the services of the most highly qualified persons irrespective of race, creed or departmental claim. The Government of India would be glad to receive suggestions from Local Governments as to what posts might thus be ear-marked and some rough estimate of the additional cost involved.

The object of the suggestions made in the preceding paras is primarily to effect as regards the immediate future, a stage of transition between the past when education was very largely in the hands of Europeans and a time when the reverse will be the case. They are also aimed at laying down a general policy for the future organization of the department. It is also desirable to have always in view the possible development of affiliating into teaching Universities. Should the

proposals, above indicated, be carried out, it is possible to postulate, (a) a service consisting of two classes carrying respectively rates of pay amounting to (1) Rs. 350 rising to Rs. 1,050, with the allowances suggested in para. 12 above and selection grades up to Rs. 1,750 and (2) Rs. 250 rising to Rs. 500 and in the selection grades to Rs. 700. A smaller number of posts on the administrative side which will be filled up by the Government with an eye to efficiency and merit rather than to the claims of special service and which incumbents would keep the Indian system of education sufficiently in touch with those of other countries and a number of specialist Professors attached to teaching Universities who by their scholarship and experience would maintain a high standard of teaching in the higher grades and influence the general administration of the Universities. With this end in view the Government of India invite the opinions of Local Governments on these proposals in general and also on the special points: (a) whether the system of what may be called European allowances is practicable, (b) whether the rates of salary suggested are suitable and (c) whether the general idea underlying sub-para. (c) of the preceding para. is based on sound principles. The answer should reach the Government of India by Nov. 30.—*The Leader*.

Ready Shortly.

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AND

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Chief Lecturer in Mathematics, Government College, Kumbakonam.

SRINIVASA VARADACHARI & CO., Mount Road, Madras.

Reviews and Notices.

ELEMENTARY DYNAMICS OF THE PARTICLE AND RIGID BODY, BY R. J. A. BARNARD, M.A. (MACMILLAN & Co.)

The book is of the standard of the Madras B.A. Degree Examination and contains a major portion of the subject of dynamics (excluding statics) which could be treated adequately without the use of the calculus. It is said in the preface that the book aims at an exposition of *dynamical principles* which should be as sound as possible and at the same time suitable for beginners. In this aim we must say that the author has greatly succeeded. There are also some desirable features in the book which deserve mention. (1) Extensive use is made of the notation of limits, (2) there is a chapter on the elements of vector analysis a knowledge of which is essential to a Physicist. (3) Simple harmonic motion is treated directly as rectilinear motion under a given law of force rather than as projection of uniform circular motion, (4) there is also a fuller treatment of rigid dynamics than is usually given in elementary books. We would however venture to offer a few suggestions towards the improvement of the book in the next edition. In the third proof of the formula $s = ut + \frac{1}{2}ft^2$ given on page 24, the mean of the velocities at two instants equally distant from the beginning and end is proved equal to $\frac{1}{2}(u \text{ and } v)$ and this value is afterwards given as the average velocity without trying to show how the average velocity is given by the arithmetic mean of the velocities. Next in giving Newton's laws of motion the property called *inertia* of bodies is not mentioned at all. Again in proving the theorem of parallel axes in moment of inertia, the author could very well have given the general proof for any rigid body rather than giving a proof which holds only for a plane lamina and afterwards saying that the proof is applicable to any body.

The matter in the book is well arranged, the explanations are lucid and the whole book bears signs of having been written by an experienced and successful teacher of the subject. We would with great pleasure recommend it to the B.A. students of the Madras University.

PRACTICAL PHYSICS NOTE-BOOK, BY C. P. VENKATARAMA AIYAR, B.A. (K. NARAYANA AIYANGAR & Co., TRIVANDRUM 5 As.

The book is well got-up. It may be used in all the High Schools of the Presidency for the teaching of the preliminary portions of Practical Physics. The exercises set, cover measurements of length, area, volume and density and the simple pendulum. The instructions given in the beginning, are well-worth noting.

ENGLISH EXTRACTS AND EXERCISES, EDITED BY F. H. PRITCHARD (G. G. HARRAP AND Co., LONDON). AGENTS: THE P. T. I. BOOK DEPOT, BANGALORE. 2s. net.

This book which will be found very valuable for use in our higher school forms comprises a large number of precious literary extracts of a varied character. Different forms of prose, poetry and also drama are all represented here. The extracts are indeed "long enough to have an interest of their own." Among the collection, may be mentioned "The Review at Chatham" selected from the *Pickwick Papers* with the immortal scene of Mr. Pickwick pursuing his rolling hat, Browning's *Pied Piper of Hamelin* and Lamb's *Dissertation on Roast Pig*. Some of the other selections are, "A Garland of Flowers" by various authors, "Gerard at the Mill" from Charles Reade, and the "Black Hole of Calcutta and the Battle of Plassey" from Macaulay. The addition of "Exercises" to the Extracts is a special feature of this book. Large numbers of rhetorical considerations are sought to be embodied in these. The range of them is so wide as to include the analysis of the emotional qualities of style and the institution of comparative studies in style.

We believe that this book if used will serve as a proper guide to teachers to pursue the now frequently misunderstood or ununderstood "non-detailed studies" in English in our schools.

ADVANCED ENGLISH COMPOSITION, BY MICHAEL WEST, I.E.S. (LONGMANS GREEN AND Co., BOMBAY). Rs. 2.

We are glad to accord welcome to this work on composition which seems to us to be the result of much profitable practical experience. The author shows considerable sanity and good sense in his effort to drive home to the minds of pupils and teachers the essential principles of literary composition. In contrast to the ill-balanced manner and offensive insinuations of Anglo-Indian writers that have made similar efforts to elucidate the principles of correct English for the benefit of Indian boys, Mr. West in trying to lend an Indian colour to his remarks wounds the susceptibilities of none and even incidentally pays tribute to Indian masters of style like "Bankim and Rabi Babus."

A point which all teachers of English would do well to bear in mind, mentioned in Mr. West's

sensible and useful "Introduction" is: "Keep up your own literary work. Only a working artist can teach art." The five general headings under which the book is divided are first a general consideration of rhetorical principles, "The Substance Essay," "The Examination Answer," "The Artistic Essay," and "Letters." The division is indeed not very scientific but the author has obviously striven to impart varied if not complete usefulness to his book. The author has made a very commendable effort to offer a recipe to produce such an elusive species of composition as even the short story and his hints for technical description are creditable. But we feel that in trying to set forth in detail the forms of comparatively remote necessities like writing advertisements for newspapers, and putting down notes of the intricate parts of a motor engine the author has overlooked bestowing attention on some more intensive qualities of style. We should ask, for instance, if the author has anywhere in the book set forth sufficiently the considerations of euphony as affecting good style.

On the whole we congratulate the author and hope that his book will be widely used in schools, and more largely in colleges, of this country.

READINGS FROM INDIAN HISTORY. PART II. FROM THE COMING OF THE ENGLISH TO THE PRESENT TIMES, BY ETHEL R. SYKES. (LONDON: C.L. S.I.) pp. 232. Rs. 1-8.

This book is a supplement to Part I which gives a simple and picturesque account of the history of India from early times to the close of the seventeenth century. It deals with the coming of the English, their struggles with the Mahrattas, the French, the Sikhs and others, as well as with the growth of British dominion outside India, in Burma, and on the North-West. The chapters entitled 'Paths of Peace' and 'Modern Developments in Arts and Religion,' give some idea of the moral and material advancement of India effected under British rule. As the author says in the Introduction, the book is an attempt—successful to a remarkable extent—to string on the thread of history, the pearls of many writers, Indian and English; and the two varieties of jewels are made naturally to reflect each the lustre of the other. Her object in the presentation of the book is to try to help to unite the East and the West and to produce a better understanding between them, and an ever-increasing harmony between the Indians and the English.

The narrative is comprehensive, embracing matter of varied interest; giving numerous extracts from contemporary observers and writers about the condition of the people, and supplying interesting biographical details of the great actors both Indian and English. The dramatic and striking incidents of the last two centuries and more here dealt with are presented to us in a graphic form; while a vast amount of information is condensed in a remarkably

short space. The extracts are, almost all of them, judiciously chosen and inserted in the exact places in the narrative where they ought to be. They embrace a large number of European writers and works stretching from the *Commentaries* of Albuquerque, the *Diary* of Ralph Fitch and the *Travels* of Bernier to the *Despatches and Writings* of Sir Charles Metcalfe, the *Journal* of Lady Sale and the *Speeches* of Lord Curzon. While quotations from Indian writers and historians are largely given, the author does not mention the names of even the most important writers from whom she has extracted, so that we are not in a position to judge always with accuracy the degree of authenticity and reliability which they deserve. The mottoes at the beginning of the various chapters are perhaps the brightest and the most suitable that may be secured to signify the subject-matter. Many of them vigorously appeal to our imagination and mind—especially, the prophecy of Guru Tej Bahadur regarding the advent of Europeans into the land, the sad poem of Shah Alam about his own misfortune, Amir Abdur Rahman's saying to illustrate the might of the British power, and Tennyson's lines on the Relief of Lucknow. The arrangement of chapters and paragraphs is good; and the book is illuminated with a large number of good illustrations and maps; many of the pictures are from old Indian drawings and rare contemporary prints and illustrations, reproduced by permission of the India Office and of private owners.

OUR SEA-POWER—ITS STORY AND MEANING, BY H. W. HOUSEHOLD—WITH FOREWORD, BY ADMIRAL THE LORD BERESFORD. (MACMILLAN & Co.) 1917. pp. 179. 1s. 6d.

This is a remarkably good book which explains sea-power and its meaning, how England won it and has been keeping it, and why she must always keep it as essential to her Empire and freedom. It begins with a brief account of the growth and decay of sea-power among the ancient peoples of Phoenicia, Greece and Rome. It traces the first faint dawn of English sea-power in the sea-raids of the Teutonic settlers in the country and in the restless adventurous daring of the Danish and Northmen pirates who swarmed into England in the 9th and 10th centuries and who pushed boldly across the wild North Atlantic even unto America, hunting the whale and the seal and the walrus. It follows the establishment of perfect English command of the Channel and of the home-waters—England's sovereignty over "the narrow seas"—that kept the country safe from invasion through the long Hundred Years' War; and it explains the evolution of the bold buccaneer of the 16th century, from the shipman of Chaucer, who was half-pirate and half-trader. Drake, Hawkins and others of their age demonstrated the great lesson that a great empire like Spain with scattered colonies and a large trade, if unable to guard the highways, would surely deter-

orate and break into pieces. The seventeenth century wars with the Dutch taught an equally potent lesson, that a nation with a large carrying trade, and dependent on sea-borne traffic for its food and raw materials, if unable to command the seas, would be faced with utter ruin, its harbours would be full of idle ships, its dockyards out of work and its land full of starving people.

The potency and charm of great names like Drake, Blake, Hawke and Nelson are described in a charming and effective manner—especially the tradition that they inspired, viz., 'to attack and lay the enemy close and make the action decisive'—a tradition that happily continues to inspire British sailors of the present day and British Admirals of the present war, Beatty and Jellicoe. Moreover various instances are given of the terrible disasters to which England had been exposed in the past, when she neglected her navy, or hampered its growth and freedom by wooden and inelastic rules and limitations; or when her Admirals like Matthews and Byng set an example of backwardness and hesitation—an example only too readily followed.

The book is written in an effective and simple style, and develops in a peculiarly happy and interesting manner the story and significance of English sea-power. Its central theme is the importance and vital necessity of the command of the sea to the growth and maintenance of England's imperial power. One of the most famous seamen of the present age, Lord Charles Beresford, writes the introduction and lays special stress on Mr. Household's happy treatment of the whole subject, his arrangement of matter and the spirit which he infuses into it; and he warmly commends this book to all the patriotic teachers of the Empire. The narrative is stirring and in some places even lofty, and must appeal vitally to all men of British blood.

ROBIN HOOD—HIS MERRY EXPLOITS—RETOLD BY CHARLES WILSON. ILLUSTRATED. (LONDON: G. G. HARRAP & Co.) AGENTS: THE P. T. I. BOOK DEPOT, BANGALORE. pp. 159. 1s. net.

We have already reviewed in our columns a book about Robin Hood published by Messrs. Harrap & Co. (*Stories of Robin Hood and His Merry Outlaws* by W. McSpadden—Told through the Ages Series). The ballads and songs about Robin Hood—not a robber and a brawler but a brave and chivalrous adventurer, and ever the friend and benefactor of the poor, of the oppressed and the weak, of honest labourers and trades-folk and the inveterate foe of grasping nobles, hypocritical priests and oppressive rulers—are numerous and are among the earliest products of English ballad literature. Only the most important and interesting stories are here reproduced in simple narrative form with just a slight touch of archaic words and idioms. But they embody all the charm and

humour, the human element and generous impulses of the heart which run through the whole collection. Fourteen stories are here told beginning with Robin's outlawry and ending with his marriage and his piteous death. The goodly figures that kept Robin company and were his chief lieutenants in all his daring exploits—Little John, 'as skillful with his bow as with his staff,' Friar Tuck 'than whom a stronger bow and stouter man there never was,' Will Scarlet, and Maid Marian—these are portrayed in all their picturesque brag and chivalrous deeds. The book is well got up and remarkably cheap for its price and is one of a new series that Messrs. Harrap & Co. are now publishing under the title of "All-Time Tales." It forms a continuous and connected narrative of the great outlaw's achievements; and we commend it heartily to all school-going children and youths.

MAIN CURRENTS OF EUROPEAN HISTORY, 1815—1915, BY PROFESSOR F. J. C. HEARNshaw. pp. xv + 367. (MACMILLAN & Co.) 1917. 7s. 6d. net.

The outbreak of the Great War has roused the keenest interest in international politics and awakened the British mind to the necessity of the study of recent history. Since the beginning of the war, many new text-books of European history in the nineteenth century have been published, since the historical basis and explanation of the present situation lie largely in the leading lines of the development of Europe in the last century. Professor Hearnshaw has brought out this fascinating and illuminating book on the history of the century between the Congress of Vienna and the outbreak of the Great War. He follows the general method of treating the continent as a whole and describes the various stages of its development from the standpoint of international politics. He lays stress upon those movements which were common to all the states of the continent and upon those aspects which reveal unity in action or ideas. He explains that the three most striking features of the nineteenth century were the growth of an European unity by means of an expanding body of international law and custom, the powerful operation of the spirit of nationalism and the development of democracy; and that what at first sight appear to be separate movements like cosmopolitanism, imperialism and socialism were really tributary to these main currents—being either the extension or the outcome of internationalism, nationalism or democracy.

The book, which is a summary of lectures delivered by the author to a large body of teachers in London, is divided into two parts, the first part dealing with the origin of the three main currents; and the second tracing the action and interaction of these three down to the outbreak of the present war. By 1794, democracy, the first of the three controlling principles, had come into potent operation in the wake of the French Revolution. The

second current, viz., the spirit of nationality, was in France the bequest of the Revolutionary and Napoleonic tradition, while in the rest of Europe it was the result of the struggle for liberation from Napoleon's yoke. It was the Napoleonic tradition that begat the aggressive national ideal of conquest, militarism and universal ascendancy—which is the bane of Germany now—and that created in each nation which participated in the War of Liberation a sense of unity, and excited still further the flame of patriotism. The settlement effected at the Congress of Vienna marked an immense advance in the direction of international government and the organisation of a European commonwealth—the third great factor of the history of the nineteenth century.

The period between 1815 and 1848 witnessed in its early years the era of the various international congresses held under the auspices of the Concert of Europe created in 1815. The Concert was however monarchical, militant and reactionary, and died out after the Congress of Verona which met in 1822. It consistently ignored and resisted the growing forces of nationality and democracy; but it had many reasons begotten of its experience to regard these forces with hostility and alarm, and it had no prevision to see that these were largely to mould the future of Europe. The eight years between the Congress of Verona and the July Revolution of 1830 were marked by numerous nationalist agitations some of which were premature and abortive. But they saw the liberation of the Greeks, Rumanians and Serbians from Turkish control and the creation of the Latin-American Republics 'to redress the balance of the old world where autocracy had re-established itself.' There was initiated about the same time a parallel democratic movement which in some countries as in Italy was harmonious with and helpful to the cause of nationality, and in a few states was actively opponent to the latter. It however triumphed in the July Revolution and received fresh stimulus from the unimpeded popular advance which went on in most countries, and from the utopian political speculations of men like St. Simon, Proudhon, etc. The year 1848 saw the high-water mark of this democratic movement, in the fall of Prince Metternich, and the almost simultaneous insurrectionary outbreaks in Vienna and Berlin, Hungary and Sardinia, among the Czechs and other peoples.

But within four years (1848—1852) democracy had discredited itself, failed tragically in Italy and Austria, and ridiculously in Germany. The transformation of the second French Republic into the Empire of Louis Napoleon, meant the triumph of the Napoleonic idea and with it of the principle of assertive nationality. The unification of Italy and the creation of the German Empire were further triumphs of the latter idea.

The new Europe which emerged after the Franco-Prussian War "saw the indisputable supremacy of Germany on the continent, the temporary elimination of France as a great power, the continued

hostility of Italy to Austria, the new and implacable Franco-German antagonism generated by the Prussian occupation of Alsace and Lorraine," and it also inaugurated the Habsburg policy of *Drang nach Osten* now exaggerated into the Teutonic political and military dominance over the Turkish Empire. In this new era, three series of pressing problems presented themselves for solution to the various countries—(1) a number of acute domestic questions in each, like Ultramontanism and Socialism in Germany, and the Irish problem in Britain; (2) the growing national consciousness of the Balkan peoples further complicated by Austria's *Drang nach Osten* and Russia's countermove towards the Dardanelles and (3) a remarkable outburst of commercial, maritime and colonial activity in which even Italy and Germany raced, and which has produced the partition of Africa and Oceania into European spheres of influence and saw in England the birth of the movement towards Imperial Federation.

The dawn of the present century "witnessed Ireland, Poland and Bohemia restless with unrealised desire, saw Alsace-Lorraine still holding out her hands to France, Schleswig to Denmark, Trentino to Italy, Slavonia to Serbia, Transylvania to Roumania. To some extent in all States, but to a remarkably violent extent in Germany, had patriotism developed into national egoism and love of territorial acquisition. Professor Hearnshaw calls the period 1901—1914 the era of the schism of Europe in which Germany's aggressive and incalculable diplomacy—accompanied by ostentatious exhibitions of mailed fists and shining armour—turned her into an intolerable neighbour and a source of constant irritation and alarm to the continent." The *Weltpolitik* of the Kaiser is in reality the expression of the demands of the great and growing expansionist Pan-Germans. The *Entente Cordiale* of 1905, the Algeiras Conference of 1906, the *Triple Entente* of 1907, the formal Austrian annexation of Bosnia and Herzegovina, the Agadir Incident, Bulgaria's treacherous attack on Serbia and the Treaty of Bucharest—these are shown to be the main links in the complex chain that has led to the present War.

The author insists that it is the fault of the *Entente* Powers not to have taken up the Teutonic menace seriously enough and carried their defensive measures with even a tithe of the German energy.

The last chapter and the Epilogue deal admirably with the meaning of the War and the danger that it portends alike to the European commonwealth and international law, the smaller states, the ideas of nationality and democracy and above all to the great moral issues of right and wrong. They explain how the war is not merely a duel between antagonistic ideas but also a severe test of practical efficiency and conclude that the best hope of the future lies in the cementing and perpetuation of the great alliance between the *Entente* Powers and America for the maintenance of public law.

The book deserves a wide circulation at the present time and has got the merit of having recast, in the light of nearly three years of the war, every previous conclusion on the international politics of the past half a century.

WALL-ATLAS OF EUROPEAN HISTORY: (1) THE FORMATION OF THE ROMAN EMPIRE; (2) THE ROMAN EMPIRE SHOWING THE BARBARIAN INROADS; (3) THE ROMAN EMPIRE SHOWING THE TEUTONIC SETTLEMENTS (A.D. 476); (4) EUROPE IN THE TIME OF CHARLES THE GREAT (758—814 A.D.); (5) EUROPE IN THE TIME OF OTTO THE GREAT (A.D. 962); BY W. & A. K. JOHNSTON. 1917.

Each map mounted on cloth, rollers, etc. 5s. net.

We have received the abovementioned five maps which form the first issues of an entirely new series of twenty-four history maps designed to show the chief political changes and national movements in Europe from the formation of the Roman Empire to the beginning of the present War. The series includes special maps illustrating the growth of Prussia, the formation of the German Empire, Switzerland and the Russian Empire, the Netherlands, Italy in 1859, and the Balkan Peninsula after 1878. The size of each map is 40 inches by 30 while the colouring is bold and attractive, and names of places, provinces and towns and battles are printed in large letters so as to be seen clearly at class-room distance.

The first map shows the formation of the Roman Empire and explains by means of different colours, the successive acquisitions of territory by Rome from the beginning of the First Punic War (264 B.C.) down to the time of the Emperor Diocletian. There are two insets, the first being a map showing the respective possessions of Rome and Carthage; and the second being a chronological table of Roman acquisitions. Only the most important towns, provincial divisions and battle-fields are shown in the map.

The second map illustrates the Barbarian inroads into the Roman Empire—the original homes of the tribes, the main lines of their marches and their ultimate destinations. Each section of the Barbarians is shown in a special colour, and the arrow-marked lines of march have the dates of the migrations shown along with them.

The third illustrates the Teutonic settlements in the Roman Empire about A.D. 476. Two inset maps illustrate Europe under Theodoric and under Justinian respectively.

Europe under Charlemagne forms the subject of the fourth map. The original territory of the Franks, their subsequent conquests under Clovis and his successors down to 814 are shown in different colours. Inset is a small map of Western

Europe showing the partition of Charlemagne's Empire effected by the Treaty of Verdun (843).

The last map explains the political condition of Europe under Otto the Great (A.D. 962). The other prominent states of Europe, like the Byzantine Empire, Capetian France, England, Hungary, Leon in Spain, and Bulgaria, are remarkably clear. And the colours extend even beyond the kingdom of Russia as far as the territories of the Saracens, the Khazars, the Magyars and the Finnish races.

We hope the other maps in the series will be equally good and clear. The series supplies a long felt want of the teacher of European and Ancient Histories and should be the property of every institution which teaches those subjects.

PUBLICATIONS RECEIVED.

A Hand-book of Elementary Mathematics with Solutions of S. S. L. C. Public Examination Question Papers, by P. R. Subramania Aiyar, B.A., Maharaja's College, Pudukotah.

Robin Hood, by Charles Wilson. London: Harrap. Agents: P. T. I. Book Depot, Bangalore. 1s. net.

English Extracts and Exercises, by F. H. Pritchard. London: Harrap. 2s. net.

The Scientific Study and Teaching of Languages, by Harold E. Palmer. London: Harrap. 10s. 6d. net.

Wall Atlases of European History: (1) The Formation of the Roman Empire. (2) The Roman Empire showing the Barbarian Inroads. (3) The Roman Empire showing the Teutonic Settlements. A.D. 476. (4) Europe in the time of Charles the Great, A.D. 758—814. (5) Europe in the time of Otto the Great. A.D. 962. London: Johnston. 5s. net each.

Report of the Vacation Lectures for Teachers held at Jaffna. Ceylon Educational Review Office. Re. 1.

The Place of Indians in Indian Education, by Vetus. Modern Review Office, Calcutta. 1 a.

The Colour Line in the Educational and Scientific Departments. The Modern Review Office, Calcutta.

Speeches and Writings of T. K. Krishna Menon, B.A. Vidyavinodini Press, Ernakulam. Re. 1.

Pamphlets & Books from the O. L. S., Madras. Commentary on Hosea in Telugu. 10 as.

The Uniqueness of Christ in Tamil. 3 pr.

Bible Studies in Evangelism, by Rev. A. A. Scott, B.A., B.D. 3 as.

The Lord's Day in English. 2 as.

The Lord's Day in Telugu. 2 as.

Grounds for Belief in God, by W. H. Campbell, M.A., B.D. Telugu. 3 as.

Indian Educational Notes.

The Report of the Madras Teachers' Guild from its last annual meeting in April 1916 to June 1917:—*President*:—Mark Hunter, Esq., M.A. *Vice-Presidents*:—Rao Bahadur A. C. Pranatharthihara Aiyar, B.A., I.S.O., Mr. P. V. Seshu Aiyar, B.A., L.T., Rao Bahadur K. B. Ramanathan, B.A., B.L., L.T., Mr. P. Lakshminarasu, B.A., Mr. J. C. Rollo, M.A. *Secretaries*:—Mr. P. Subramanya Ayya, B.A., L.T., Mr. C. K. Krishna Aiyangar, B.A., L.T. *Treasurer*:—Mr. V. Venkatasubbaiya, B.A., L.T. *Section Secretaries*:—*English*—Mr. M. K. Sundaravaradachari, B.A. *History*—Mr. V. Seethapathi Naidu, B.A., L.T. *Mathematics and Science*—Mr. V. Subbaya, B.A., L.T. *Elementary Section*—Mr. N. Swaminathan, B.A., L.T. *Members of the Council*:—Mr. K. R. Ramaswami Aiyangar, M.A., L.T., Mr. A. Panchapikessa Aiyar, M.A., L.T., Mr. S. Vasudevarachari, B.A., L.T., Mr. T. K. Sundararaja Rao, B.A., L.T., Mr. Syed Ali Mahomed Zakir, Mr. S. Gnanamuthu, B.A., L.T., Mr. K. Subramanya Aiyar, B.A., L.T., Mr. T. G. Srinivasachari, B.A., L.T., Mr. P. Venkatchellam Aiyangar, B.A., L.T., Mr. G. Ratnam Pillai, B.A., L.T., Mr. M. Munuswami Aiyar, B.A., L.T.

Strength:—With the regrettable decline in the activities of the Guild, there has been a decline in its strength. There are at present 90 members and 2 associates on the rolls of the Guild.

The Executive:—More than two meetings of the Council were announced but the Council met only once. It is a matter for deep regret that owing to one of the Secretaries having been ill and the other anxious to be relieved of his Secretaryship for want of time, the Guild has not been able to meet enough especially when new educational forces are at work in the land and great developments are expected in the future.

Our great loss:—The Guild places on record its deep sense of sorrow at the passing away of Prof. M. Rangacharya, M.A., who, as a scholar of great repute, a professor of great popularity, a steady friend of the Guild, and an educationist of great fame, was a source of pride to the teaching profession in general and the Guild in particular.

Our conspicuous gain:—The Guild cannot fail to take note of the well-merited recognition conferred by Government on our much esteemed and justly beloved Vice-President M. R. Ry. K. B. Ramanathan, B.A., for his unwearied services on behalf of education and co-operation. It hastens therefore to thank Government for having been mindful of the steady, silent but nevertheless efficient work of Mr. K. B. Ramanathan, one of the founders and prime movers of the Guild.

General Meetings:—It is a matter for some gratification that the Guild has a record of some work done and some results achieved. There were 5 meetings during the period under review: the first was an annual meeting of the Guild held at Pachaiyappa's as far back as April 1916 under the presidency of Mr. P. Lakshminarasu for the election of fresh office-bearers and for the Guild contributing

its share of work towards the S. I. T. U. Conference at Madura. The second meeting was again at Pachaiyappa's and devoted to the discussion of a carefully prepared paper on "Women's Education, with special reference to the Government of India's Circular on it" by Mr. P. A. Subramanya Aiyar; the lecture was presided over by Miss Bretherton, Professor of English, Women's Christian College, whose sudden death at Kodaikanal after her marriage has filled the Guild with profound sorrow. The third event was a thoughtful and practical paper on "The Teaching of Geography as an essential factor in the Industrial development of a country" by Mr. K. A. Viraraghavacharyar; Mr. H. A. Hart, the then Inspector of Schools, IV Circle, presided over that well attended and lively meeting. Later in the year in December, the Guild met in the Presidency College under the presidency of Mr. Mark Hunter, the President of the Guild, who directed the discussion of the several aspects of the S. S. L. C. and other topics of the evening with decided ability and enthusiasm. The members who took part in the meeting made valuable contributions to the thought on the questions of the evening—the alternative in Vernacular Composition in Group A, the position of B subjects, the tests of eligibility for admission into Colleges of holders of S. S. L. Certificates. The discussion of the day was boiled down into definite recommendations to the University and the S. S. L. C. Board, asking for the acceptance of Translation from Sanskrit or any other classical or modern European language as an alternative for Vernacular Composition in Group A, the recognition of the Presidency average where it is less than 40% in English or 35% in other subjects as a qualifying minimum for admission into Colleges, the restriction of the scrutiny of the Moderation Board only to cases other than those that stand the above test, the exemption of S.S.L.C. pupils from the needless duplication of courses and the necessity for relying on written examinations only for purposes of assessing school work. The fifth and last meeting was a stimulating address on the 'Teachers' status and the Teachers' supreme needs' by Prof. Rao Bahadur K. V. Rangaswami Aiyangar of Trivandrum under the presidency of Prof. K. B. Ramanathan. Two more meetings had to be postponed, one for want of a quorum and the other for want of good weather.

The S. I. T. U.:—The Guild did not lay behind in contributing its wonted share towards the organisation and development of the S. I. T. Union activities. Mr. P. Subramanyam organised the Madura Conference and Mr. C. K. Krishna Aiyangar as one of the Executive Committee of the Union ran the Cuddalore Conference presided over by Mr. K. B. Ramanathan. The Cuddalore Conference owes its success in no small measure to the continued efforts of a large number of enthusiastic Guild members. The Union has now been entrusted to the care of two of the most active members of the Guild: Messrs. P. A. Subramanya Aiyar and C. K. Krishna Aiyangar.

The Section work:—The History and English

sections have no report to submit. The Mathematics and Science section and latterly the Elementary section have been doing excellent work. They have a record of strenuous work to show.

The Mathematics and Science Section, the Secretary of which was Mr. V. Subbaya, has by its active labours during the year under review more than redeemed the reputation of the Guild. It held 13 meetings mostly in the central and convenient premises of Pachaiyappa's College. The Section has by its timely resolutions and vigorous Committees done a great deal by both giving to Geometry and Algebra, Physics and Chemistry, the close and discriminating attention, they deserve in the S.S.L.C. syllabus of studies. The Section has made constructive and practical suggestions towards improving the syllabuses in Mathematics and Science under Group C. of the S.S.L.C. scheme that have been embodied in resolutions passed at its meetings of the 24th and 31st January 1917 and the 6th and 7th February 1917. It has devised means of co-ordinating the S.S.L.C. Science syllabus with the Intermediate Syllabus in Physics and Chemistry and has advocated the fusion of Physics and Chemistry in Group C. The Section has demonstrated, by its bright record, the utility of an ever-watchful and devoted Secretary, the use of Committees that do not scorn details and routine work, and the great need for allying with the section experts and enthusiasts in the subjects whether they are of the Guild or not. The section has suggested the desirability of removing the special subscription of 4 As. for the section. The thanks of the Guild are due to Mr. P. V. Seshu Aiyar for his sympathetic guidance of the activity of the Section. The thanks of the Section of the Guild are also due to Messrs. P. Lakshminarasu, Moffat, Kershaw, K. Chinna-tambi Pillai, M. C. S. Anantapadmanabha Rao, T. K. Venkatarama Aiyar, G. Sambamooorti and K. P. Subramanya Aiyar.

The Elementary Section:—The Section has resumed its useful and popular work after a break of two years since August 1914. With its Secretary, Mr. N. Swaminathan, happily restored to his normal health, with the enthusiasm of Rao Bahadur A. C. Pranatharthihara Aiyar for this special service to Elementary teachers and with the sympathy and patronage of Rao Sahib C. Ramanujam Chetti Garu, the Section is bound to enter on a career of ever-increasing usefulness to the great body of Madras Elementary teachers. Of those who helped in this scheme of service to the depressed part of the teaching profession by their syllabuses, books, classes and lantern lectures, the names of Messrs. M. K. Sundaravaradachari, P. A. Subramanya Aiyar, N. Swaminathan and Dr. U. Rama Rao merit special mention. The teachers were put through a course in Civics in Tamil both in Triplicane and Georgetown, the former under Mr. P. A. Subramanya Aiyar's guidance and the latter under Mr. M. K. Sundaravaradachari's. That lectures of this kind are a desideratum is proved by the encouraging attendance at the lectures. The average attendance at the lectures for the whole of Madras

was 110 and the average attendance for each teacher was 7. The thanks of the Guild are due to Messrs. A. C. Pranatharthihara Aiyar and T. S. Subramanya Aiyar for having inaugurated and blessed the attempts of the Guild in educating the Elementary teachers. The lectures were brought to an appropriate close by an impressive and inspiring function in Pachaiyappa's Hall presided over by Rao Sahib C. Ramanujam Chetti Garu. The issue of diplomas to teachers by the President of the Section, full of solicitude for the Elementary teacher, the presentation to schools of copies of Tamil treatises on Civics, written by an able citizen and given away by the first citizen of Madras, a thoughtful address by a diligent student of educational problems, the hearty good cheer provided by the prince of hosts, the philanthropic Sheriff and the unwearied friend of education, formed a fitting close to the past labours of the Section and furnished a bright augury for the future. It is refreshing to note that Mr. Hart cherished the same love and sympathy for this work as was displayed by his Indian predecessor. To Messrs. A. C. Pranatharthihara Aiyar and Calavala Ramanujam Chetti Garu, the Guild cannot be too grateful for the great and invaluable services they have rendered to the Guild and to this Section, in particular. The work of this Section, alike the work of the Guild in general, could be placed on a solid and satisfactory basis, if the following needs of the Section are met in the near future. The raising of adequate funds for carrying on the educative work of the Section and for giving some suitable recompense to lecturers, a growing body of workers pledged to the work of writing and lecturing for the special benefit of the Elementary teachers, and the prime necessity of a building for the Section and Guild work are among the immediate needs of the Section. Besides the Rs. 45 5-7 advanced by the Treasurer, the Secretary of the Section had no receipts; deducting Rs. 20-5-7 for expenses incurred so far, there is an advance of Rs. 25 with the Section Secretary. Rao Sahib C. Ramanujam Chetti Garu and Rao Bahadur A. C. Pranatharthihara Aiyar, I. S. O. have kindly consented to be the patrons of the Section.

Finances of the Guild:—Besides a few incidental expenses for the 5 meetings organised by the Secretaries and the one or two postponed meetings, the General Secretaries have not incurred any expenditure. The receipts and expenditure will however be audited by Mr. M. Veeraswami Ayyah of Pachaiyappa's High School and a statement submitted to the Guild at a later meeting. The fixed deposit in the Kellett Memorial Fund is in the Indian Bank and is earning its interest.

The Guild Library is located in the Tondaimandalam School, to whose authorities the Guild expresses its great indebtedness and thankfulness for the generous forbearance they have shown in continuing to accommodate the library there, in spite of great inconvenience.

Minutes of the Annual Meeting of the Madras Teachers' Guild.—The annual meeting of the

Madras Teachers' Guild was held at 8 P.M. on Saturday, the 13th of October, in the C. R. O. High School, Perambore, with M.R.Ry. P.V. Seshu Aiyar A.V.L., B.A., L.T. of the Presidency College, one of its Vice-Presidents, in the chair. After music and light refreshments, the business of the meeting commenced. The Secretary, Mr. P. Subramanya Aiyar, read the annual report; and the report was formally adopted. The following office-bearers for the year 1917-18 were then elected:—

President:—Mark Hunter Esq., M.A.; **Vice-Presidents:**—Messrs. Rao Bahadur A. O. Pranatharthi-hara Aiyar, B.A., I.S.O., Rao Bahadur K. B. Rama-natha Aiyar, M.A., B.L., L.T., P. V. Seshu Aiyar, B.A., L.T., A. Panchabikesa Aiyar, M.A., L.T. and S. Guana-muthu, B.A. **Secretaries:**—Messrs. T. R. Krishnama-charyar, B.A., L.T. and V. Subbaiya, B.A., L.T. **Treasurer:**—Mr. V. Venkatasubbaiya, B.A., L.T. **Secretary of the English Section:**—Mr. T. G. Srinivasacharyar, B.A., L.T. **Secretary of the History Section:**—Mr. N. Subramanyam, M.A., L.T. **Secretary of the Mathematics and Science Section:**—Mr. K. Subramanya Aiyar, B.A., L.T. **Secretary of the Elementary Section:**—Mr. N. Swaminathan, B.A., L.T.; **Members of the Council:**—Messrs. (1) Sayyad Ali Mahamud Zakir; (2) V. Sitapati Naidu, B.A., L.T.; (3) A. Tiruvengadatta Aiyangar, B.A., L.T.; (4) O. K. Krishna Aiyangar, B.A., L.T.; (5) G. Ratnam Pillai, B.A., L.T.; (6) M. Muniswami Aiyar, B.A., L.T.; (7) T. K. Sundararaja Rao, B.A., L.T.; (8) P. A. Subramanya Aiyar, B.A., L.T.; (9) K. Narasimhacharyar, B.A., L.T.; (10) M. K. Sundara-varadaacharyar, B.A. and (11) A. Sundaram Aiyar.

Mr. S. Ramachandra Aiyar, B.A., L.T. of the Perambore School welcomed the members of the Guild. Mr. P. Subramanya Aiyar, B.A., L.T. proposed a vote of thanks on behalf of the Guild to the C. R. O. High School Teachers' Association, Perambore, for their hospitality to the members of the Guild; Mr. P. A. Subramanya Aiyar seconded the proposal and it was duly carried. Mr. S. Ramachandra Aiyar of the Kellett High School thanked the Boy Scouts of Perambore; and with the usual votes of thanks to the chair and the retiring office-bearers of the Guild, the meeting came to a close at about 6.30 P.M.

Resolutions passed at a meeting of the Teachers' Association, Rajah's High School, Ettayapuram, held on 9-11-17.—Resolved that the Memorandum to be submitted to the Secretary of State for India should contain proposals not only regarding Elementary Education but also Higher Education, and that the following may be embodied in that Memorandum:—

Elementary Education.

1. Arrangements must be made for imparting free instruction to boys and girls in all villages.
2. The attendance at school should be made compulsory for boys during a period of five or six years, first in Municipal areas and then in groups of villages proclaimed by the Government; and such compulsion should be extended to all areas within a period of ten years.

3. Girls' education should be pushed on as vigorously as possible.

4. District and Divisional Committees should be constituted to look after the education of children in their areas with powers to recommend the appointment, &c., of teachers and to frame syllabus of studies, &c., for the school in their areas.

5. The prospects of teachers must be made as attractive as possible and good and free accommodation must be provided for them.

6. Arrangements must be made to teach some handicraft to every schoolboy.

Secondary Education.

7. The Secondary schools must be mostly under the management of private bodies registered for the purpose.

8. A small funded capital, a Provident Fund and a suitable Hostel must be three of the conditions precedent for recognition of schools.

9. These schools must be of two kinds:

- (1) English Schools in which English is the primary language and the vernaculars the secondary, and
- (2) Anglo-Vernacular Schools in which English is the secondary language and the vernaculars the primary; all non-language subjects are taught in the vernacular and the study is made mostly vocational.

10. The Secondary Schools must be under the control of the Senate of the University.

11. With a view to attract men of parts to the profession and to make them stick to it and do their work cheerfully, provision must be made (1) for all qualified teachers being paid on some uniform and handsome grades of salaries; (2) for all *bona fide* teachers to appear for higher University Examinations without the production of the necessary attendance certificates, and (3) for qualified teachers being drafted into the inspectorial staff, no difference being made between them and those employed in Government Schools.

12. To enable the managers of schools to pay the staff handsomely, liberal Government grants must be given, not less than one-third of the gross cost of the school or the net cost whichever is less.

Collegiate Education.

13. The number of Universities in every province must be increased, there being one for a portion of a province having one common vernacular language.

14. Each University must be managed by a Senate of 100 members of whom 75 are elected non-official members, 10 being elected from among teachers and professors in schools and colleges.

15. The Senate must exercise control over colleges and schools as well.

16. The net cost of the University, if any, must be borne by the Government.

17. The curricula of studies in the colleges must be correlated to those in the schools.

18. Vernaculars must be given as important a place in the curricula as English.

19. Provision must be made for awarding diplomas in Commercial and Industrial subjects, and in Oriental Languages as well.

The Educational Review.

The adjourned Senate Meeting on the 21st instant had before it, among other matters of minor educational

Last Senate Meeting.

importance, the question of the Intermediate courses. Pointed attention was drawn to the heaviness of this course by a motion of which Mr. K. Ramanujachariar of the Pachaiyappa's College had given notice to reduce the qualifying minimum for a pass in English from 40 to 35 per cent. The motion for the reduction of percentage of marks was lost by 22 voting for and 26 voting against. But the real utility of having brought forward this motion, as perhaps it was intended, consists in a definite expression of an opinion by various members of the Senate that the English course was inordinately heavy, and the character of the examination unnecessarily stiff. This view had found expression on various occasions and had found supporters long before this. The question had always been evaded one way or another till at last after a series of evasions by those that are responsible for the course, it has been brought home to the members of the Senate that it is futile to expect the Board of Studies in English to do anything by way of remedy. This impression, widely prevalent, was given effect to at last by a certain number of Fellows, and met with sympathetic reception from a far larger number in the House than the above poll would indicate. It

was admitted generally that the reduction of the percentage of qualifying minimum will not avail, so long as the character of the course in English continued to be what it was, and the system of examination remained as it did. One Principal of a first-grade College pointed out the command of English expected often took the form of a demand for 'fancy knowledge,' and another stated that what was demanded of the Intermediate student here was far higher than that which was called for elsewhere. We are strongly of opinion that the time has come for not merely the Intermediate but the whole position of English in the University courses to be considered anew. The position of English must be settled and the character of the examination placed beyond possibility of mistaking. We trust that some at least of the members of the Senate who are responsible for large numbers of students entrusted to their care would consult among themselves and make out a course in English more rational and within the powers of the candidates for whom they are intended. In this particular more than anything else the expert has become a big millstone round the neck of education proper. We hope that the matter would be dealt with satisfactorily and the scandal removed once for all.

The movement for the liberalising of the constitution of the Indian Universities is rapidly growing in strength and extent of influence. After the handsome way in which the newly-

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admitted recruit to Indian Universities, the Patna University, has been treated, it should be ungenerous in the extreme indeed to keep the older Universities of India where they are. We are not therefore surprised that the Committee appointed by the Bombay University Senate to consider in all their bearings the amendment of the Indian Universities Act, have made several suggestions in the direction of widening the basis of University education in India. In place of the present constitution of the University of Bombay in which eighty out of hundred Fellows are nominated by the Government, ten elected by the registered graduates and ten by the Faculties, they propose one which would embody a substantial extension of the elective principle. They have recommended that public bodies also like the Bombay Corporation, Chambers of Commerce and Mill Owners' Association should be allowed to elect a proportion of the Senate in order to create more public interest in the working of the University. The Committee recommend the following redistribution of the hundred seats and we note that due provision has been made for the safeguarding of educational interests and for the representation of expert academic opinion, which ought to dominate the councils of the University if it should win any recognition for itself in the civilised world and if its work should be of real value to the highest ends of education: Election by College Professors, Assistant Professors and Lecturers, 25; by Headmasters of regis-

tered schools, 5; by registered graduates, 20; by Faculties, 10; by public bodies, 10; Total, 70; Nomination by Government, 30. We have no doubt that the prerogative implied in the last item will always be exercised in favor of securing the most efficient educational opinion available and in redressing such grievances as may be felt by communities which are in a minority.

We must congratulate the Government of India on the excellent addition they have just made to their series of useful publications on matters relating to education—we refer to the comprehensive account of the inspection of schools in England by Mr. H.G. Wyatt of the Indian Educational Service. The Bureau of Education made a good start years ago with the publication of the suggestive report on rural schools in Central Provinces by Mr. Sharp, the present Educational Commissioner with the Government of India. The quality has been very well sustained in the later productions of the series and Mr. Wyatt's latest study is not the least valuable. Following an exhaustive account of the development of educational inspection in England the writer proceeds to a lucid analysis of the principles underlying the more recent reforms in the direction. The main tendencies may be summarised under the following heads: (1) the restoration of 'grind' in the class-room; (2) the encouragement of other than intellectual activity including (3) the promotion of manual and out-door pursuits; (4) the

tendency to regard the individual rather than the class as the unit in education; (5) the promotion of greater elasticity in school organisation. In view of the recommendations made by the Public Services Commission on the subject of the special provision to be made for the training of Inspectors, Mr. Wyatt's remarks on the making of the School Inspector in England will be read with great interest. The brochure has also the additional advantage of having a foreword from the pen of the Educational Commissioner himself and we hope the Bureau will bring out more useful publications of the same kind. The want of educational manuals with special reference to Indian conditions has always been felt very widely and guidance of the kind proposed ought to be quite welcome to teachers in India.

We confess that the misgivings expressed by us in our last editorial remarks on this subject have not vanished on acquaintance with the proceedings of the Conference. No objection could possibly be taken to the plea put forward that the Conference was not started under official auspices. But no case was made out by the organisers of the movement for the starting of an organisation of the kind in the present educational conditions of Southern India. It was maintained, when the need for the Association was questioned, that there were a large number of educational problems in which the Headmasters as a class were specially

interested and that the Association was intended to devote itself to them. The argument was plausible, but a careful perusal of the proceedings has convinced us that they do not conform in any measure to the description placed before the public. We are sure that Assistant Masters, as much as Headmasters, are interested in the very useful ideas put forward by the Rev. D. G. M. Leith on the subject of "The Place of Secondary Education in National Life,"* and we may be pardoned if we fail to see any special kinship existing between Headmasters as a class, apart from their Assistants, and the apparently useful lectures of Mr. A. J. Leech and Mr. A. C. Noehren on the "Boy Scout Movement and the School Play-grounds." The Resolutions arrived at the Conference were published in the last issue and in none of them do we discover the special province claimed for the Association by its organisers. May we also inquire of the organisers of the Conference why they could not secure any Indian Headmaster to deliver at least one of the educational lectures organised by them, but had to rely on the obliging generosity of Messrs. Leith, Leech and Noehren?

Special interest attaches to the very thoughtful and suggestive address delivered by His Honour Sir James Meston at the last Convocation of the University of Allahabad, as emanating from one who has had no mean share in the evolution of the Allahabad Univer-

* Reproduced elsewhere in this issue.

sity in recent years and who is now laying down his high office as Chancellor of the University, with his impending retirement from the Lieutenant-Governorship of the United Provinces. The most valuable part of the address was devoted to an exhortation to the members of Universities to avoid the excitement of politics during the period of educational development. The attention of the younger generation must be drawn with unmistakable emphasis to these words of wisdom. "No one is so foolish as to imagine that students should not be interested in the discussions of the day, for the young mind naturally reaches out to everything that touches patriotism, the finest of all human emotions. But it can very rarely be desirable that the transient controversies of the moment should invade the class-room; and it is always and entirely wrong that they should occupy the time that is needed by the student either for his studies or for his necessary physical recreation. The teacher who encourages or allows this is in my judgment false to his trust. But political speculation in the more general sense, the well-ordering of the country's future means, as I shall attempt to show you, is something very different and may rightly engage the attention of this assembly of young graduates, just as I am sure it is constantly in the minds of my colleagues in the Convocation." It was also well that His Honour laid stress on the need for increased education with the growing demand for political responsibility and power.

The highly inefficient conditions of educational life in Bengal have always formed a very serious problem and we are not surprised that an apparently well-informed writer has drawn attention to them in a recent number of the *Educational Supplement of the London Times*, in view of the approaching inspection of the Calcutta University by Dr. Sadler and his colleagues on the University Commission. Enormous growth in the number of students to be dealt with combined with the serious inconveniences consequent on the location of the University in such a crowded city as Calcutta have made the problem particularly acute. Making allowance for some exaggeration which undoubtedly exists in the accounts given by the writer, it must be conceded by all dispassionate observers of conditions in Bengal that it has a substratum of truth. "The University rules provide" says the writer, "that a student must live in a hostel or regularised mess or with a parent or guardian. Many hundreds of them live with so-called guardians who are often younger brothers or no relations at all. There is no effective supervision and the student has little time or inclination for healthy recreation or outside reading. If the latter is indulged in, it is seldom of a wholesome kind. If the youth is living at home with his parents, it is most unlikely that he will have any room where he can work quietly and keep his books in order. Frequently he has to assist in domestic duties such as

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cooking (!) and tending the younger children. Before and after College hours he may be claimed for work connected with paternal or family estate or business and with the not uncommon family litigation. His wife is usually only a very junior member of the family zenana and all the household arrangements such as meals, will be planned to meet the convenience of the older members of the family while he makes shift as best as he can. He is distracted by quarrels in the zenana; and if he happens to be unmarried, much time will be taken up with almost interminable discussions and preparations connected with his wedding. This may be fixed for astrological reasons, at the most important period of the College term or two or three weeks before the University examination. And if he is married, there is sure to be some burial or birth ceremony to occupy his time and thought. In a word the home is often a place where serious study is impossible." Some of the drawbacks are not confined to Bengal only but find expression in the somewhat defective social organisation all over India; only the rapid increase in the number of young men undergoing collegiate education in Bengal has served to accentuate the difficulties with regard to that province. The defects of actual teaching and educational organisation pointed out by the writer, if true, deserve serious and immediate attention. Wide-spread love of cram; fondness for easy methods for passing examinations; attempts just before the examinations to get a know-

ledge of "expected" questions; and unfortunately even an occasional trading in question papers which have leaked out; these are put forward as being constantly noticeable. This testimony is by no means solitary and we hope that educational opinion, Indian or European, will grapple with them in all earnestness with the sole aim of increasing efficiency.

It has been a long-standing complaint that the educationist in Southern India has allowed himself to be relegated to the background, by people belonging to other professions who have set themselves up as educational experts. Such Indians as have been elected to the Syndicate or as representatives of the Senate in the Legislative Council have mostly been non-educationists and Indian teachers and Professors have been content to exhibit the docility of spirit which has always been a notorious defect of their calling. Times without number have they failed to champion boldly the prestige of their profession and have played the second fiddle to big bosses of wealth and influence. We have known even instances of educationists making their choice, even when educational representative offices were concerned, against members of their own profession and striving actively to get a lawyer or politician elected to them. As was wisely pointed out by the present Indian member of the Madras Executive Council, the Hon. Dewan Bahadur P. Rajagopalachariar, M.A., B.L., C.I.E., in a lecture delivered some time back at the

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vs.

Amateur.

Teachers' College, Saidapet, the field for education is mainly for the expert, however much a little amateurish element may be availed of, to correct his tendency towards theoretical standards of efficiency. In these circumstances, it is somewhat painful for us to notice that it was reserved for an educationist to put forward the fatal theory that the present educational element in the Madras University, into which serious inroads have already been made in recent years, should be still further reduced. That was in a sense the doctrine which Rao Bahadur Prof. K. V. Rangaswami Aiyengar of Trivandrum preached at Madras, at a recent meeting of the South India Teachers' Union. He told us gravely that he did not know why the teacher element should be predominant in the Syndicate and the Senate and he made the startling discovery that the great mischief lay in the nomination of teachers by the Government to Fellowships in the University. Wordsworth could not have felt more confident, when, according to Matthew Arnold, he laid his finger at the precise spots where Europe was groaning than the lecturer, when he evidently found that the root of all evil in the educational world of Southern India was due to the dominance of the teacher in the University. We must for the time being however despair of being able to convince the lecturer of the need for educational opinion being predominant in the Syndicate and the Senate, though we do not ourselves contemplate

with any equanimity the sight of University Professors hanging to the coat-tails of Judges or the leading members of the legal profession. We are bound to say that the South India Teachers' Union has made a very bad start, by giving even its tacit assent to a proposition of the kind seriously put forward at what is styled the first of a series of lectures on University Reform delivered under its auspices. If University reform is to be in these directions may God save us from such changes!

The volume of opinion in favour of Vernaculars as making Vernaculars the media of instruction in media of instruction. Secondary schools have gained so much strength in recent years that it seems to be quite natural for the Headmasters' Association to have adopted a resolution to that effect at their recent Conference. The last Conference summoned by the Viceroy to consider the question of the teaching of English in Secondary schools served to some extent to shape the current notions on the subject. But information of a more striking kind is revealed by certain revelations made by the report of the School Final Examination of the Bombay Government. The Bombay Educational Department has for several years past allowed candidates for the School Final Examination the option of answering in the vernacular question papers in some subjects. Judging from the opinions expressed by certain educational reformers, it might be supposed that the candidates would have rushed in their

hundreds to take advantage of this concession. The last report on the School Final Examination shows that this is far from being the case. The Director of Public Instruction, who, we may say, is by no means unfavourably disposed towards the vernacularists, writes as follows about the last examination:—"The number of candidates who availed themselves of the concession allowing questions to be answered in the vernacular were as follows:—In History and Geography: 87 Mahrathi, 24 Canarese, 7 Gujarathi, 4 Sindhi, and 1 Urdu, and in classical languages: 1 Mahrathi. It will thus appear that the total number of candidates who elected to answer in vernacular was very small, less than 10 per cent. of the number appearing at the examination, and that there is little popular demand for this concession." An attempt is being made to induce the University to embark upon the policy which has proved a failure with reference to the School Final. It may be usefully remembered in this connection that, while the School Final may be able to do with a little English, the Matriculate, who is supposed to be qualified to enter the University, must have enough knowledge of English to be able to follow the lectures in the College which are in English.

The recognition of the educational value of the Cinema need not deter one from realising its possible dangers also to the juvenile mind. The exhibition of films of a 'sensational' nature, full of incidents

of crime and vice, even with the saving element of a moral lesson at the end, cannot but be productive of the most pernicious influence upon immature minds. The evil was recognised by the National Council of Public Morals in England sometime back, and it appointed the Cinema Commission to enquire into the influence of the Cinema upon the moral, physical and mental well-being of the child. The Commission found that the evils had been considerably exaggerated, but it nevertheless considered it necessary to say that there was sometimes the danger of pupils being led to imitate the incidents of crime represented on the screen. To quote the words of the Commission, "Children are remarkably imitative and worshippers of success, and there have been undoubted cases of attempts by children to copy the examples they have seen, thus leading them, probably at first unintentionally, into crime. The Commission recommends that no film showing the method of carrying out any crime of this kind, should be shown, and in this they will doubtless have the general support of the public." There has as yet been no appreciable attempt at the 'censoring' of Cinema films in India and it seems to be absolutely essential that precautions should be taken before similar consequences follow in the juvenile educational world in this country.

Two resolutions of far-reaching importance, relating to educational matters have just been issued by the

Educational Resolutions.

Imperial Government of India. One of them is on the proposed reorganisation of the Educational Services, in accordance with the recommendations of the Public Services Commission, and the other on the subject of Agricultural Education in India. The former of them is reproduced *in extenso* elsewhere in this number and deserves the close attention of our readers. It is now recognised on all hands that with the rapid spread of western education in the land and the large number of those who have also received advanced education in foreign countries, the time has come for a closer association of the Indian element of the higher ranks of the educational services in India. It is not merely a matter of a few appointments, with attractive emoluments attached to them, but a question affecting the opportunities for the better kind of educational experience for India. The proposed reform would not merely be a measure of the barest justice to the children of the soil, but is also calculated to advance appreciably the very end of the educational system in India, the effective assimilation of western culture by the people of the land. The Resolution on Agricultural Education is based on the recommendations of the Conference which met to consider the subject at Pusa in February 1916 and must go a long way to make education in agriculture more practical and popular in India.

The utterances of the *London Times* with regard to schemes of Indian administrative progress are sometimes 'inspired'.

and we sincerely hope the remark made in one of its recent issues is true, that "the visit of Mr. Montagu will mark a turning point in the history of Indian education." The present circumstances of public life in India, as far as we are able to gauge them, do not seem to concentrate much of attention on the subject, but we will be only agreeably surprised, if the subject of education, so vital to national life, will also command some attention from the Secretary of State, during the Conferences he will have with various people on the subject of political reforms in India. Among the items of reform advocated in the article referred to, there is the suggestion that there should be more devolution of power to Provincial Governments, with a view to settle the problems peculiar to each Presidency, by the Government immediately concerned. It is conceded that even such a subject as the introduction of free and compulsory education may be solved by such means. Approval to express the idea that 'there should be an increasing association of Indians in every branch of the administration' and the consequential recommendation is made that provision should be made for the raising of the educational institutions in India, to the level of those existing in Europe. We hope that ideas like these, with a desire to treat education with more generosity in the annual budgets will figure prominently in impending schemes of reform.

Macaulay demolished long ago the position of those pessimists who are never

tired of lamenting the alleged decadence of the world and its downward progress from bad to worse. There are croaking critics of the same kind in the educational world, who must always condemn the present and exalt the past. When it is found difficult to deny such concrete expressions of improvement as better buildings, equipment, staff, etc., they take refuge behind the comfortable proposition, somewhat difficult of analysis and disproof, that the educational *atmosphere* and *spirit* were better in those times. There cannot be a better eye-opener to such critics than the following lurid picture of the cruelties that existed in the schools of Britain in the seventeenth and eighteenth centuries, that has recently appeared in the *New Statesman* of England:

The Eton Beagles have raised many a fine row in our day, but what would we have thought of the cruel practices encouraged in the boys at Eton in the seventeenth and eighteenth centuries? "No work," Sir H. Maxwell Lyte writes, "was done on Shrove Tuesday after 8 A.M., and at Eton, as elsewhere on this day, the practice prevailed of torturing some live bird. The college cook carried off a crow from its nest, and, fastening it to a pancake, hung it up on the school door, doubtless to serve as a target." The cruel ram-hunt was another form of sport for young barbarians at play. "The college butcher had to provide a ram annually at election-tide, to be hunted and killed by the scholars." An old Etonian, who writes on this subject in a volume called "Killing for Sport," adds that the unfortunate animal was "hamstrung and beaten to death in Weston's Yard." In the Scottish schools at the same time cockfights were among the permitted amusements of schoolboys. If these were the pastimes of young scholars and gentlemen, one can guess how brutal must have been some of the sports of the classes that never had had a chance to learn better.

We will not be looked upon as being cynical, if we venture **Examinations.** to make the remark that among the fashionable opinions of educational critics of to-day is the wholesale condemnation of examinations. Despite all their faults, they have served to test the possession of certain qualities of mind, habit and character, very essential to success in every department of human activity. Cheap sneers at the alleged iniquities of examinations serve no purpose, however consoling they may be to the heart of the 'slacker' who will want success without the effort to deserve it. The constant disparagement of examinations have only had an evil effect on students who have often been led to imagine themselves to be innocents committed to the devilish engine of a University. The Right Hon'ble Mr. H. Fisher, whose authority to speak on the subject is derived not only from the distinguished official position he occupies, but also from his deep and varied experience of educational matters, found it necessary to speak in defence of examinations at a meeting of the Lancashire and Cheshire Institutes held the other day at Rochdale. He said that he did not follow the fashion which disparaged examinations. He believed that for ordinary men, preparing themselves for the ordinary work of life, regular courses of study, punctuated by wisely conducted examinations were a great help to improvement. But he pointed out, at the same time, that examinations should follow teaching and not teaching examinations. The opinion will find support from all those who have paid any attention to the subject and

'SOME NEW LIGHT ON AN OLD TOPIC OF INDIAN HISTORY'

LECTURE BY

PROFESSOR S. KRISHNASWAMI Aiyangar
of the Madras University.

Mr. Chairman and Gentlemen :

The Secretary of the Teachers' College Association having done me the honour of an invitation to address his Association on a subject of my choice, I acceded to the request with the greatest pleasure as it gives me a chance of seeing young enthusiastic graduates looking forward with pleasurable expectation to entering the profession of education to which I myself belong. The pleasure however, was not altogether unmixed with the pains of having to choose a subject of address that would be alike acceptable to these prospective teachers themselves as a whole, and to those others who may be associated with them on an occasion like this. On a former occasion when I was done a similar honour, I took it upon myself to offer a few words of advice on the responsibility of the teaching profession. I heard a criticism of that choice as something very near 'carrying coals to Newcastle,' as that subject and subjects akin to it, are the topic of every day discussion more or less, in the Training College where you are undergoing the crowning piece of education which would set the seal of fitness upon you for entering the teachers' profession. The criticism is not perhaps a very unreasonable one and teachers under training, as others elsewhere, do look forward to a certain amount of novelty in the topics of discussion in their Association. While it was necessary to steer clear of that criticism, it was equally necessary to keep out of another—that of not carrying my own special work wherever I went. A choice in the circumstances was a matter of some difficulty and in ultimately deciding to address you a few words on "Some New Light on an Old Topic of Indian History," I have taken upon me the responsibility of laying myself open to criticism under

the second head. I might argue in justification that all of you practically have resolved to enter the honourable profession of educating the youth of the country, and, by a silent implication, to devote yourselves to the training of the next generation for the responsibilities of citizenship. Whatever may be the special branches in which you might have taken your degrees already, whatever may be the special branches which you have chosen to undergo your training in in the college here, and whatever may be the subjects that might be entrusted to you in the various institutions to which you may assign yourselves, there is one subject which, as Indian teachers engaged in the training of Indian youth, you are bound to have a rational and full knowledge of, and that is the subject of Indian History in all its aspects.

Indian History does not suffer at present by too much cultivation, as you all know well enough, and it is a common complaint that it is difficult to beat up sufficient interest in Indian History in the higher courses of the University. It is hardly necessary for me to analyse the various causes that may underlie this deplorable state of things, but it will be readily conceded that the state of things in respect of Indian History and its study is more or less unsatisfactory. It is only now that Indian History is beginning to be presented in an attractive form and if it is not so presented in text-books, it is naturally repellent to young minds, and that kind of repulsion cultivated early it is hard to eradicate later. One of the chief causes for this unsatisfactory state of study of Indian History, in all its branches, is the inadequate preparation of those engaged in teaching—I do not mean only those engaged in the teaching of the particular subject. Much rather I mean the teaching profession as a whole. If the teacher is a man whose main function it is to train the young mind to enable it to form a correct judgment upon all matters that may come before it later in life, it

is absolutely necessary that it should be in a position to form a correct judgment on matters of vital interest to the country, which may be occupying the minds of people outside, and may be creating a considerable amount of stir at the time. Dogmatism, in my opinion, does not carry conviction, and where a teacher shows himself to be unconvincing in anything that he may have to say to his students he will cease to have any hold on the student to such an extent that he becomes a useless factor in the forming of the young mind. Nothing provides better than history the material for arriving at a correct judgment upon various matters of daily occurrence upon which, it would be essential in the interests of the welfare of the youth, that the teacher should be able to direct feeling and opinion. This could hardly be done without a sound and substantial study of the history of the country. Indian History therefore ceases to be, from this point of view, the mere hobby of a specialist by profession. It is a subject of living interest to everybody, to the teacher most of all, and is one of the most potent of influences for good. Various catch-phrases sometimes pass for sound history. It may serve the purpose of the politician well or ill; students are not politicians, though nothing could be said against their studying politics, and politics is something in which sound opinion is a matter of great difficulty without considerable previous preparation and judgment. You must be familiar, most of you, with historical notions such as are embodied in the expressions "The Unchanging East," "Isolation of Indian History," and such like phrases. If you just take one of these and analyse the underlying notions carefully, and examine them from the point of view of history, you will find that the fraction of truth contained therein is perhaps comparatively small. As in all epigrams there is just a mixture of truth in these, but the fraction thereof is comparatively speaking, negligibly small.

The History of India unfortunately is yet in the course of making in spite of the whole-hearted labours of more than two generations of enthusiasts who have been turning their energies to this topic. The honour of the lead in this

matter, as in various other matters, is due to the European savant and scholar, and the work of European orientalists as a whole has met with great success in unravelling what was practically lost history. Most of you must be familiar with the dictum of Elphinstone that the first known date in Indian History is that of the invasion of Alexander. But the patient labours of orientalists since the days of Elphinstone have carried back this reliable date by about a century and a half or perhaps at the most, two. Notwithstanding the labours of these eminent orientalists there is a great deal that lies at hand for us to do, and as our outlook widens the vista into the past deepens, and a great deal that has already been done seems to be more and more tentative in character, as in fact they never were expected to be final. In this great work of re-habilitating the history of our own country there is a great deal for us to do; we can do it with far greater advantage in respect of the drawbacks in essentials. If this be true who can be expected to do it better than those engaged in teaching. It is with a view to exhort all of you, whether your special subjects be history or no, whether you have actually to teach Indian History or no, to take some interest in this subject and cultivate it as a private hobby that I chose this particular subject to-day. Each one of you can do some little work in it, and to each one of you it is absolutely necessary that your preparation in this subject should be adequate in order to discharge your duties out of the classroom at all satisfactorily. I was put in mind of this subject prominently by a letter that I got the other day, from a gentleman engaged in teaching in a second-grade college who wanted advice for a special course of study in this very subject, though he is engaged in teaching some other subject. In the present state of work in Indian History it is an advantage if you are not studying it as beginners trying to make their first acquaintance with the subject. You will bring to bear upon the subject a certain amount of critical faculty which is absolutely necessary in regard to this subject of study. I may here quote a few words of Lord Acton in respect of

this particular point: "For our purpose the main thing to learn is not the art of accumulating material, but the sublimer art of investigating it, of discerning truth from falsehood and certainty from doubt. It is by solidity of criticism more than by the plenitude of erudition that the study of history strengthens, straightens and extends the mind." In regard however to Indian History, at any rate for a considerable part of it, we do want "the art of accumulating material" as well, but it is the other art now that is required in a far greater degree. The more you exercise this valuable art in your own studies the more convincing your opinions become, and therefore the more readily accepted.

Having said so much by way of introduction, let me proceed to illustrate my position by going back to the actual topic of my address. Most of you probably know that since the days of Elphinstone a considerable volume of research work had been carried on vigorously; and if one branch of studies pertaining to this work can be said to be carried to greater perfection than others, it is the literature of Buddhism. This study along with the collateral studies in other branches has been the means of giving us an additional century and a half of Indian History in many ways. It is now more or less generally accepted that we know to a very near degree of approximation the date of death (Nirvana) of the Buddha. This has been arrived at by a combination of various elements of which we gain precise information from foreigners mostly. The starting point again is the invasion of Alexander. The interval, that is supposed to have elapsed between the death of the Buddha and the Coronation of Asoka, forms another landmark. We are indebted to this detail to the Ceylonese, but the really precise detail that leads to the fixing of this date and various other dates dependent thereon, is contained in one of the Edicts of Asoka which mentions a number of Greek potentates among the successors of Alexander who held rule in the West contemporaneously

with him; of whom two died at an interval of less than five years and if both of them entered into treaty relations with Asoka, Asoka's actual period of rule could be calculated to within a possible error of five years at the outside. It is this that really constitutes the starting point of accurate chronology in Indian History. But as it happens this single source among the many available sources of the History of India on this particular period has been naturally laid hold off as yielding the best results for history. More recent research however, shows that there is perhaps the possibility that the other sources are not quite so fruitless of good results as they were perhaps too readily taken to be, and scholars are not wanting who had essayed this re-examination of the whole position from various points of view. Jain sources have been more or less completely excluded till recently, and the Brahmanical sources particularly the Puranas have not been studied to the degree of fulness to guarantee the best results. A recent attempt at working up the Jain sources towards this particular object was made by Dr. Charpentier of Upsala in the 'Indian Antiquary' with results which do not seem to carry conviction. Mr. K. P. Jayaswal of Patna made an effort with considerable success two years ago to re-study the question from the point of view of the Puranas, and an article in the Journal of the Royal Asiatic Society by Mr. R. D. Banerjee in regard to another part of the chronological frame-work connected with this question exhibits fundamental flaws in the system of chronology so far adopted. I need hardly say that chronology forms the basis of history and without a satisfactory system of chronology any effort at studying the developments of thought or religion, or civilisation would be impossible, and without such a wider reach the study of history as history must be regarded comparatively barren of results.

The date that seems to have the largest following for the Nirvana of the Buddha is 483 B. C.

but there are other dates as well. There are those that accept 477 B.C., among them Dr. Charpentier referred to above; and there are those who take it at 487 B. C. These are narrow differences of 5 years either way, and may not matter very much. There is however, the traditional 544 B. C., and the difference between the two is well over sixty years. There are very few now-a-days among European scholars who regard this date as worth considering. The opinion of the greatest authority on Buddhism in regard to this matter deserves consideration in this connection, and I make therefore no apology for quoting a note from Professor Rhys Davids' article in the latest edition of the Encyclopædia Britannica. "The now generally accepted date of the Nirvana of the Buddha is arrived at by adding together two numbers, one being the date of the accession of Asoka to the throne, the second being the length of the interval between that date and that of the death of the Buddha. The first figure, that of the date of Asoka, is arrived at by the mention in one of his Edicts of certain Greek kings, as then living. The dates of these last are approximately known; and arguing from these dates the date of Asoka's accession has been fixed by various scholars (at dates varying only by a difference of 5 years more or less) at about 270 B. C. The second figure, the total interval between Asoka's accession and the Buddha's death is given in the Ceylon Chronicles as 218 years. Adding these two together the date of the Buddha's death would be 488 B. C., and as he was 80 years old at the time of his death, the date of his birth would be 568 B. C. The dates for his death and birth accepted in Burma, Siam, and Ceylon are about half a century earlier namely 543 and 623 B. C. the difference being in the date of Asoka's accession. It will be seen that the dates as adopted in Europe are approximate only, liable to correction if better dates are obtainable." That puts the whole question very clearly and with absolute fairness, A

comparative study of the Buddhist sources with whatever is available of Jain sources on the one side, and of the historical chapters of the Puranas on the other throws a new light upon the whole question not merely of chronology but of other very interesting details as well. I shall make here a bare statement of the salient features without going into what might be regarded technical details of chronological and other matters of what such a comparative study shows to us. There seems to be an error in the Buddhist tradition in regard to the second factor of Professor Rhys Davids', the interval of 218 years between the death of the Buddha and the accession of Asoka to the throne. It must be remembered that this date is found only in the Ceylon tradition committed to writing a few centuries after the event, though there is evidence of a continuity of the tradition. Quite as much can be said both of the Jain tradition though it came to be set down in writing much later, and of the Brahmanical tradition embodied in the dynastic chapters of the Puranas. As much reliance therefore can be placed upon either of the latter sources as on the former provided the adventitious errors in the transmission of these could be satisfactorily explained, and the whole texts bearing upon these clearly understood. Such a study rehabilitates the Sisunaga dynasty, and gives us a whole history of India all through the period of power of the Achæmenian dynasty of Persia, i.e., a history ranging from the end of the 8th century B.C. to practically the death of Asoka and may go down even earlier. The error in the Ceylon tradition referred to is, that the interval of 218 is not the interval between the death of the Buddha and the accession of Asoka; but it is the interval between the former event, and the accession of Asoka's grandfather Chandragupta. According to the now accepted chronological arrangement, which in regard to those particulars is in agreement with the Pauranic sources as well, the interval between the accession of Chandragupta and that of

his grandson is 53 years, leaving only about seven years to be accounted for. A careful and critical study of the Pauranic lists in respect of this dynasty of the Sisunagas lends support to the conclusion that the dynasty was composed of 12 rulers in succession whose total period of reign was either 360 or 362 years. The actual list in the majority of the Puranas contains only ten names. It is clear that careful editing and collation of the various texts is necessary notwithstanding the excellent work of Pargiter on this subject. Such collation lends considerable support to an arrangement that could be arrived at providing for the 12 rulers and for the total period of 360 years. Such an arrangement is found to agree quite satisfactorily with the Jain tradition as embodied in the Pattavalies alike of the Digambaras as well as of the Svetambaras. The only substantial corrections in either case are (1) you have to introduce the two omitted names in the Pauranic lists from Buddhist sources which mention them; (2) you have to understand a particular ruler who put an end to the contemporary dynasty of Malwa as the Magadha ruler contemporary with the last of the Malwa rulers. For both of these corrections there is very good authority. The Buddhist sources show themselves to be no more accurate in respect of details than the other sources. The Pauranic list contains four names beginning with Sisunaga of whom they give no other detail than that Sisunaga ascended the throne of Magadha going from Benares where he left his son to rule for him. The fifth in succession is the famous Bimbisara the contemporary of the Buddha and of Mahavira Vardhamana the founder of Jainism. It is a well-known fact that his son and successor Ajatasatru was also contemporary of both. Mahavira, according to Jain tradition, died in the seventh year of Ajatasatru, and the Buddha according to Buddhist tradition likewise in the eighth year of the same monarch. Both traditions therefore mention this monarch's name. The successor of this monarch is stated in

Buddhist tradition to be a person by name Udayin or Udaya. The Jain tradition has no mention of this ruler. The Pauranic list which professes to be history does mention Udaya as the grand-son of Ajatasatru there being between the two the comparatively long reign of the son of Ajatasatru, known by the name Darsaka. This Pauranic statement finds confirmation in so many words and with a few additional descriptive details even of the individual, in one of the dramas of the famous dramatist Bhasa, a dramatist of reputation anterior to the days of Kalidasa. There are those who ascribe to this author, for reasons quite worth consideration, a date earlier than Chanakya, though it may not turn out correct, and a date which may turn out correct on further research, slightly earlier than the Christian era. Whatever be his date, it cannot be taken as anything very considerably later than the other Buddhist sources. This would lend support to the view that the Pauranic lists are perhaps generally correct. It is after Udaya that we have to borrow the two names of comparatively short-lived rulers from the Buddhist list to make up the 12. It is in succession to these that there emerges the name of the ruler whom we shall have to regard as the first historical emperor of Hindustan. By putting together such stray hints about him as we get from the Tibetan historian Taranatha of the 16th century, and reading these in the light of the Jain and Pauranic tradition we seem to be warranted in concluding that he was a great monarch who coming from Champarana (modern Champaran in the Nepalese frontier) occupied the Imperial throne of Magadha, perhaps by invitation, and having effected the conquests of Kalinga in the south and the minor border kingdoms in the west, advanced westwards to the conquest of Malwa where he put an end to the local dynasty of the Pradyotas, the successors of Pradyota, contemporary of the Buddha whose name has been handed down to us in various works of Indian literature and tradition. There

is reason to believe that it was he, Nandavardhana by name, or his son Mahanandin that advanced further westward to dislodge the Persians who had laid hold of the Punjab and Sind west of the Indus, and constituted it into a separate satrapy of India, the twentieth satrapy of the Persian Empire of Herodotus. It was possibly one of these, or a predecessor, (whom, according to tradition, we shall have to take that the Jain included among the Nandas) that is mentioned in the inscription of Kharavela of Kalinga, the third ruler of a dynasty which set itself up independently soon after the death of Asoka, and the interval given between this Nanda Rajah and Kharavela is a date which has been read as 103 by some and 300 by others. This later reading seems to be confirmed by a recent examination of the inscription *in situ*. Thus by a comparative and a constructive study of the various sources, and by a judicious and critical handling of such details of information as are available, we are able to reconstruct a hitherto unknown chapter of Indian History—the history of the first Indian Empire which had so far been regarded as that of Chandragupta.

For convenience of reference, I shall set down here the whole list of rulers beginning with Sisunaga, the first of this dynasty, and ending with the last Maurya, giving against each one of these rulers the probable duration of his reign, according to this revised arrangement.

Dates in B. C. and Synchronisms.

SISUNAGAS.			
No.	Kings.	Years.	B. C.
1	Sisunaga of Benares	40	727—687
2	Kakavarna	26	687—661
3	Kshemadharman	20	661—641
4	Kshema-vit	40	641—601
5	Bimbisara	51	601—552
6	Ajatasatru	34	552—518
7	Darsaka	35	518—483
8	Udayin	16	483—467
9	Anuruddha	9	467—458
10	Munda	8	458—448

No.	Kings.	Years.	B. C.
11	Nanda I (Vardhana)	40	449—409
12	Nanda II (Maha, the Great; Turakudi, or Bhadrāsena)	35	409—374
13	Nanda III (Mahadeva ; minor)	} Reigns that do not count.	8 374—366
14	Nanda IV (the unnamed minor)		
NANDAS, SO CALLED.			
15	Nanda V (Padma 'The Great').	28	366—338
16	Nanda VI (Sumalya ; 'The Greedy')	12	338—326

MAURYAS.

	Ctr. Novr.
Chandragupta	326/25—302
Bindusara	302—273
Asoka (before Abhisheka)	277—273
Asoka (after Abhisheka)	273/2—236
Kunala	236—228
Dassratha	228—220
Samprati	220—211
Salisuka	211—210
Somadharman	210—208
Satadhanus	208—195
Brihadratha	195—188 B. C.

Revolution under Pushyamitra.

It will be seen from this that, if this list should turn out to be correct, reliable history of India gets pushed back well into the 8th century B. C. This is more or less a reclamation of about 2½ centuries of early Indian History. I now come to the special features of this particular arrangement and the difficulties that are in the way of our accepting it altogether as established history. This has reference largely to the first part, the dynasty of Sisunagas. (1) I have already pointed out that two names, numbers 9 and 10 are borrowed from the Buddhist list. (2) The reign periods are not all of them given uniformly in the Puranas, but most of them are taken from available variant readings from the Puranas, the largest of these variant readings being taken from the Matsya Purana. This indicates clearly that the text of the Matsya is worth investigating if the various manuscripts and editions of this Purana should be studied with a view to arriving at the correct text which may lead further to the acceptance of that.

so far at any rate as this part is concerned, as the source of other texts. This is matter that requires further investigation in which each one of you, in his own particular locality, might do something to help. (3) I have explained why number 7 should be introduced into the list and what guarantee there is for its correctness notwithstanding the omission of this name both in the Buddhist and the Jain texts. (4) Numbers 11 and 12 find proper mention only in the Puranas but they are indirectly, and in other forms, more or less referred to in Buddhist sources. (5) Numbers 13 and 14 are inserted here on the possible ground of their having existed, from a statement made by a classical author Curtius. (6) The last two 15 and 16 are regarded as father and son, the descriptive name Nava Nanda being interpreted the Neo-Nandas rather than nine Nandas. The confusion between the two interpretations, I shall explain presently. In respect of the Mauryan section of the list, all the sources are more or less agreed in respect of the first three rulers. The Pauranic list finds some confirmation in the Jain sources regarding the next two. Number 6 was a patron of Jainism, and he figures pretty largely in Jain tradition which gives us seventeen generations between Ajatasatru, the contemporary of Mahavira and Samprati the great Mauryan patron of the Jainas. And it is clear in this Jain tradition that we find the specific mention of the nine Nandas which would take us from the last Nanda up to Udayin, number 8 in the list. We see clearly in the list that the first three names give us no indication that they were called Nandas at all; whereas it is more or less clear that the remaining successors were either actually called Nandas, or could be regarded as such. That is a point that requires to be further investigated. But the general tradition of the Jains which figures in the various Pattavalies with only minor modifications, if any, is this:— They count 470 years from the death of Mahavira in the 7th year of Ajatasatru to the birth of Vikramaditya, the founder of the Samvat Era in 58-57 B. C.; and, according to them, Vikramaditya was 18 years of age when he came to the throne; and the equation actually given is to his fourth year. The year of his accession therefore is year 488 after the death of Mahavira, and that is equated with the one of the Samvat Era 58-57. This would give for the death of Mahavira the date 545 B. C., and if the Buddha followed him the year after, according to Buddhist tradition the eighth year of Ajatasatru, then the Nirvana of the Buddha must have taken place in 544 B. C. This seems to be in keeping with the southern tradition of the Buddhists and does no violence to the tradition of the Jains. This requires therefore to be considered carefully before it is rejected *in toto* as it is now only too often done on the strength of the study of Buddhist sources alone. It is impossible within the limits of a lecture to go through all the minutiae of detail that lends support to the conclusion that the date in regard to this particular period needs revision in the light of the three traditions combined. My purpose in this lecture has been merely to draw attention to at least one interesting topic which is of great importance, namely, that an Empire of India, including in the term only Northern India, was in existence at a time co-eval with the palmy days of the great Persian Empire in the immediate neighbourhood. We all know too well that early in its history, and perhaps owing to an accident of history, the energies of these Persians were all turned westwards against Greece, and were so fully occupied, all through the period of their existence, that they could pay but little attention to their eastern frontier. It is clear from Herodotus that that frontier, extended to the Indus in the best days of the Persian Empire. It was somewhere about 510 B. C. that Darius was able to constitute the Twentieth satrapy, including in it the valley of the Indus to the right of the river, and all Afghanistan on this side of the mountains. This last

portion, and what now constitutes the whole of Afghanistan south of the Hindukush, was known, in ancient Persian traditions, as White India, whatever that expression might have connoted to them. One point in this connection seems worthy of remark. Taxila, one of the two capitals, according to the Ramayana, of the kingdom of Gandhara was a great University centre, and according to Buddhist tradition royal Prasenajit (Pasenadi in Pali) was a student of this University as a prince, and had returned home for some years, having completed his education here, before he ascended the throne of his father in Kosala in the territory of which the Buddha himself was born. The same tradition also mentions that it continued to be a famous University centre for all India about the time that the Buddha was preaching, which, on the basis of 483 B. C. for his Nirvana would mean the period 528-483 B. C., for the greater part of which it must have been under Persian domination. Whether it would have continued under Darius to be looked upon as the true seat of Brahmanical learning is, to say the least, somewhat open to doubt. It was more than a century from that time when it was re-annexed to Indian dominions under, in all probability, Mahananda so that it is easy to understand that when Alexander came in there he found the territory held by Hindu sovereigns of considerable power. In this connection it deserves to be noted that it is one of these Nanda kings that conquered Malwa in the 10th year of his reign in Magadha. This person is the first great Nanda according to the list given above called Nandavardhana in the Puranas. He is given the reign of forty years as a king of Magadha in the Sisunaga list, namely 449-409, according to this chronology. It is this sovereign that overthrew the dynasty of the Pradyotas of Malwa and set himself up on the throne of that western kingdom. This is inferable from the Pauranic texts themselves. It is again the Matsya Parana that gives the variant readings making up the line that the Sisunaga king, 'the

good son Nandivardhana' ruled for thirty years. The modification "Sisunaga Nripah" lets us into the secret that the dynasty of Pradyotas in Malwa was overthrown by the conquering king Nandavardhana of Magadha. The Jain traditions support this altogether from a different point of view and shows that the tradition embodied in the Pauranic list rests upon a foundation of fact. This is but one line of investigation among many that are possible, and I have taken this merely to indicate that even in political history a great deal more may be done than has so far been achieved.

I hope, gentlemen, I have made it clear to you that the particular period I have chosen to speak about is one which promises considerable scope for various lines of investigation which might all lead ultimately to definite conclusions. The little that I have been able to put before you in this lecture shows the possibility for work and what profit there would be for good work in regard to this particular subject. My special aim has merely been to draw your attention to a field of study where the greatest amount of work appears to have been done, and which still indicates the scope there is for more work so that you may not feel that you have been anticipated in various fields and therefore there is but little to be done. This survey ought to make it clear that even where the work done appears to be the most, there still is a great deal of room to do more. Since commencing the draft of this address my labour of making a convincing appeal to you has been very considerably lightened by the eminently eloquent address delivered at the recent Convocation of the University of Madras full of "wise saws and modern instances" in regard to the need for a study of South Indian History. I shall conclude this lecture of mine with a short extract from that address.

"Study then history, Gentlemen students, with the intention of seeking for what leads to the good and not to the perfect, to enlightenment and not to illusion. An understanding of the

cause of events, will always incline you towards indulgence. You will never forget that man, in spite of his sublime pride, is above all weak and narrow-minded, and that his efforts can never reach the level of his aspirations."

"In so studying you will find that history is not always a fresh beginning. If men are swayed at all times by the same passions, if the same facts occur again and again, there are none the less modifications in the course of centuries, and the similarity of events is more apparent than real. Thus in a country all men are alike, and yet they do not resemble each other. That is why the science of governing is so very difficult, specially in foreign matters; in momentous doings judgment plays no lesser a part than knowledge. But, whether it be immutable or changeable, fallacious or true, history must always be approached in a spirit of high intellectual probity, with the greatest impartiality and the most scrupulous accuracy possible. One must avoid above all the temptation of utilizing events to demonstrate personal theories or to build up pre-conceived systems. In order that the lessons of history should have their full value they should be founded on the study, often difficult, of causes, on an accurate statement of facts and an appreciation more reasoned than

positive of consequences. The latter, however, confused they may appear at the time, form through the centuries a homogenous and harmonious whole. Considered in that light, history will be as useful as can be expected; it will convince us that the doings of humanity follow a logical and unavoidable order, in spite of their apparent contradictions, and that nobody has the power to alter abruptly the course of events, such events being ruled by eternal laws and by the slow and regular evolution, common to all things in nature. Nature never proceeds by leaps. In our anxious desire to be better off, let us avoid acting too hastily. Let us weigh principles, study their application and examine their consequences by the light of the past. And, guided equally by tradition, as well as by reason and morality let us seek in the normal and regular evolution the continuous improvement which will lead us to the ideal of our dreams.....Happy are the people wise enough to remain faithful to themselves to their past and to their traditions; happy above all are those who know how to reconcile without a break those traditions with the necessities of improvement. Fortune smiles on them and the future is in their hands."

RUDIMENTS OF ALGEBRA

(WITH A CHAPTER ON GRAPHS),

BY THE LATE S. SRINIVASA AIYAR,
Headmaster, Pachaiyappa's High School, Conjeevaram,
Author of "The Problems in Arithmetic."

Sixth edition (1905)

REVISED AND ENLARGED

BY

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Professor of Mathematics, College of Engineering, Madras.

PRICE—Re. 1-0-0.

SRINIVASA VARADACHARI & CO., TRIPLICANE, MADRAS.

UNIVERSITY OF MADRAS.

ADJOURNED MEETING OF THE SENATE.

An adjourned meeting of the Senate was held on Wednesday, the 21st instant, in the Senate Room, Chempak, with Sir P. S. Sivaswami Aiyar, Vice-Chancellor, in the chair. About sixty Fellows were present.

TITLES IN ORIENTAL LEARNING.

On the motion of Mr. S. Kuppuswami Sastri, seconded by Rao Sahib G. Venkataranga Row, certain regulations regarding examination for Titles in Oriental learning were referred to the Committee to which the revised regulations had been referred by the Senate.

DRESS OF RECIPIENTS OF ORIENTAL

TITLES.

Mr. Kuppuswami Sastri moved for the insertion of a paragraph in Regulation 369 with a view to ensure decent dress in the case of those who presented themselves at the Convocation for Titles in Oriental Learning. He accepted the amendment of Mr. Allen moved by Mr. Hunter to insert the para. at the end of Regulation 369. "The paragraph was this.

TITLES IN ORIENTAL LEARNING.

Recipients of Oriental Titles shall wear a long coat and either a white, red or black turban, which may have a gold border."

This was duly seconded and carried.

On the motion of Mr. Kuppuswami Sastri, seconded by Mr. Venkataranga Row, certain consequential alterations were made in Regulation 207 as a result of certain changes introduced last year in the regulations relating to B. A. Honours in Branch vi, with a view to secure co-ordination of studies between vi (Pass) and Branch vi (Honours).

On the motion of Mr. Kuppuswami Sastri, seconded by Mr. K. V. Rangaswami Aiyangar, the existing time-table under Branch vi, Regulation 208 was deleted and some other words were also substituted as a consequential alteration.

Two other resolutions requested the Syndicate to prescribe suitable academical robes for the Oriental Titles. The Vice-Chancellor ruled the subject was covered by the resolution already passed. He said that most of the recipients of oriental titles could not afford to buy costly robes. Hence the simple arrangement.

INTERMEDIATE ENGLISH.

Regulation 185 says:—

"No candidate shall be declared to have passed the Intermediate Examination unless he obtains not less than 40 per cent. of the total marks in English."

Mr. K. Ramanujachari moved 85 per cent. be substituted for 40 per cent. He said that it was not his intention

to lower the efficiency or the standard of the examination. In the name of efficiency 80 per cent. of students were turned from the portals of the University. For the last two years Principals often made selection of those better fitted to enter the College course. It had been proved that the large failure in the Intermediate was not due to indiscriminate admission. Even in good Colleges failures had been very heavy. In the Presidency College 23 students appeared in Group III and only 8 passed completely. In the Kumbakonam College 59 appeared and only 18 passed completely. In the Rajahmundry College out of 27 that appeared only three passed completely. The speaker then gave the figures for the Wesley College, Masulipatam College, Zamorin's College and S. P. G. College and said that the results were very unsatisfactory. Since 1911 the percentage of passes was becoming lower and lower. In 1911 it was 40 per cent., in 1914 it was 39 per cent., in 1915 it was 27.5 per cent., in 1916 it was 25.8 per cent. and in 1917 it was 20.7. That was not a fair way of dealing with students. The subject had been considered by the Boards of Studies separately and each one of them wanted to make a particular course of studies symmetrical and comprehensive. The students found the burden unbearable. The consideration of the question must be taken up by all Boards together. 91.2 per cent. failed in English alone. In other Universities the minimum required for a pass in the Intermediate or B. A. was 33½ per cent. Those Universities were content with a low minimum and why should not this University also be content with a similar minimum.

Mr. Mahomed Oosman Sahib seconded the proposition.

Mr. Hunter in opposing the resolution said that he had been in recent years the Chairman of the Board of Examiners in English. He would like to say something in defence of the much-maligned examination. Last year he promised to take every possible precaution with regard to setting of papers, method in valuation and so on, and he had faithfully kept his promise. In some quarters he was represented as solely responsible for the Intermediate slaughters. He was not personally responsible for the actual setting of papers or their valuation since he became Chairman. No complaints were made against any question on the English papers. They were straightforward papers. With regard to valuation he was present at the several meetings at which instructions were given to Assistant Examiners. They were asked to give generous marks to students who were considered fit to go to the B. A. Course. His own valuation was a good deal more generous than the valuation of the Assistants. There had been no tendency on the part of the Examiners in English to be unduly severe to the candidates. The

tendency had been the other way. At present he had nothing to do with the University examinations. If 35 per cent. was fixed as the minimum for a pass, it would be to pass a man who was not fit, to go on for the B. A. Whatever Mr. Ramanujachari might say, whatever the figures might prove, he would still say that in Colleges a great many boys were admitted who were not really fit for the University Course. Those candidates were perhaps not fit for the lecture system. They just emerged from school conditions where the maximum for a class was 40 and went into Colleges where each class contained 150 students and more. Such large classes made real teaching impossible. They might try to improve that state of affairs by reduction of the strength or by some other system whereby they could expect good results in English.

Mr. G. A. Natesan in supporting the proposition said that in the old days the minimum marks in English was 33½ per cent. With the advent of experts and efficient the minimum had been raised. Reduction of the strength of College classes meant republication of classes. That would not be possible in Colleges other than Government Colleges. That would do great harm to the progress of education. Other systems had been tried, such as strictness of admission, but in vain. Undue importance was attached to the study of English, a foreign tongue. Nothing would be lost by 35 per cent. minimum.

Mr. Justice Seshagiri Aiyar in further supporting the resolution said that proposition attempted to reduce the difficulties of students. There was no use in saying that the work of the students was not sufficiently good as to justify the examiners to give them a pass. Before three years the percentage of passes was above 35, during the last three years it was about 25.

Mr. Govindaraghava Aiyar said that a personal aspect had been given to the resolution which was never thought of by the mover of the resolution. The percentage of failures in English was very high even in Government Colleges. In the attempt to see the existing state of things continue, they were changing from explanation to explanation. It was said by Mr. Hunter that if the minimum for a Pass were lowered, the examiners might raise the standard of valuation 33 or 35 per cent. was considered a good enough standard at the early stages of the University.

The Hon'ble Mr. Stone in opposing the resolution said that of all possible means of remedying the state of things, the proposal to reduce the marks for a pass was the very worst. English had been responsible for a few years for a great many failures in the Intermediate Examination. The Board of Studies in English had arrived

at the conclusion that the English Course was incapable of improvement, and they have not suggested any improvement. Boards of Studies were given an opportunity to reconsider the Intermediate course and each Board considered its own subject. The Senate might make further inquiry into the matter. There was nothing in hand and making rational proposals for improving the courses in English. Many of the books for the English course dealt with the European state of society than with the Indian state of society and presented considerable difficulty to the students. The examination ought to be on the lines whether the students had read and understood the books. He should deprecate very much the lowering of the minimum pass marks, when there was a possibility of improving the English course. The proposal was an extremely crude way of meeting with the difficulty.

Mr. F. E. Corley said that if the standard of fitness was lowered it would be disastrous to English and other subjects taken in the B. A. Course. Mr. Ramanujachari had not been supported by those who had educational experience but by those who belonged to other spheres of life. It was not said that fit persons had been rejected in examinations.

Mr. Natesan said that the boys were Indian boys they were speaking of, not boys imported from England. Rev. Mr. Zumbro said that something somewhere was fundamentally wrong. Nowhere else in the world they saw such poor results. There was no necessity to keep the standards here much above those in other countries. He knew that a rich boy failed in School Final three years. He went to England and took his degree in four years. The educational system in this country was primarily intended for training candidates for Government service. The fundamental purpose of education here was to get highly qualified men for Government service. Education was to qualify men for all walks of life in the world. He would support the Director of Public Instruction.

Mr. Justice Oldfield said that there were two propositions of Mr. Ramanujachari, one relating to Intermediate and the other to the B. A. Examination. They were asked to vote for the proposition relating to the Intermediate when they did not know what he was going to say with regard to B. A. If Mr. Ramanujachari insisted on the reduction of the minimum for the B. A., it would reduce the efficiency of ordinary graduates of the University. If he did not insist, the matter would be different. Until all the methods for remedying the state of things were exhausted it would be a pity to resort to the crude proposal of simply reducing the minimum. The report of the Board of Studies should not be accepted as final. Members of the Senate could offer

suggestions for improving the method for the acceptance of the Senate, without sacrificing the usefulness of the present syllabuses. Possibly some of those failures would have been prevented if the candidates had been taught the subject in a different way, a way which could be accepted by examiners. The Senate might consider whether any change in the methods of study which could be reflected in examinations could be introduced.

Mr. Stratham said that Indian boys need not be expected to know higher criticism of English literature in Intermediate Examination.

Mr. Justice K. Srinivasa Aiyangar said that if the standard was not high and if the examiners were lenient the only way to reduce the number of failures was to reduce the minimum marks.

Mr. Couldrey said that there was a great deal of fancy knowledge required of candidates in English. They should eliminate the study of fancy criticism. If a knowledge of English alone was required of students, more students would pass. The crucial question was whether students should be acquainted with critical books. Any alteration made in the regulation for the Intermediate would be reflected to some extent in the B. A. course. A recasting of the whole system for the Intermediate and the B. A. was necessary. They were making an unfair demand of the students at present.

Mr. Allen said that a number of Principals had expressed themselves in favour of the existing course. Mr. Couldrey's suggestions might be carried out by giving instructions to examiners. The compartmental system had not been given a fair trial and they might think of a change in the system after the compartmental system had been given a fair trial.

Mr. Moffat in supporting Mr. Stone's suggestion said that it was too much to expect students of the Intermediate class to discuss Shylock's character in Shakespeare.

Mr. K. V. Rangaswami Aiyangar said that a man clever in history was also clever in English. It was not so in the case of Intermediate Examination, judging from the results. There was some difficulty in regard to the standard. There was a sort of special in favour of languages. When the old subjects for F.A. were abolished relief came for science subjects, but not for English. Science subjects were not less important than English. He would support Mr. Ramanujachari's resolution.

Mr. Justice Abdur Rahim said that if the University failed candidates in the B. A. Honours or M. A. he could understand it. Why should they fail students in the Intermediate and shut them from completing their University course. That was a very serious matter. Were they going to allow a large number of students to complete the University course or not. He did not want to let in students who were not able to follow the course for the B. A. If they were able to follow the course for the B. A. there was no excuse for keeping them out. From

his experience of graduates appearing before him in the Court he could say they were proficient in English and argued nice points of law with ability. They all passed more than three years ago. Why should there be a discrepancy in the percentage of passes within the last three years. No explanation had been given. They should appeal to the sympathy of the examiners. There should be some general policy. Other experiments had been tried. He did not see anything bad in the lowering of marks. The standard of graduates of other Universities was not lower than the standard of graduates of Madras University. The Calcutta University had produced a number of distinguished men. A stiff examination would tell on the physical and mental development of the students. He would vote for the proposition of Mr. Ramanujachari.

Rev. Mr. Penn said that they could wait and see how the compartmental system in the Intermediate examination worked. The quality of students now admitted to the B. A. course was much better now.

Mr. S. Krishnaaswami Aiyangar said that every other reasonable remedy had been tried. It had been felt long ago that the English course was heavy. There was no possibility of the thing being heard or even reduction in quantity effected. Examination ought to be on the principles of modern English. An honest attempt should be made to bring about that state of affairs. So long as that was not guaranteed he would feel inclined, however reluctantly, to vote for Mr. Ramanujachari's proposition.

Mr. Ramanujachari in reply said that he had no intention of maligning English examiners. Mr. Mark Hunter had chosen to import that matter into the question. They should all place themselves in the position of parents of students and realise the hardship of sending away 88 per cent. of students as unfit. They were bound to pass students in large numbers after giving them sound training in Colleges. Universities existed for the benefit of students. His feeling was shared by a large number of Indian gentlemen. The children of English gentlemen were not brought up here. Lowering of the minimum did not mean smaller amount of knowledge required of students. They were all aware of the knowledge of vernaculars possessed by those English gentlemen who had obtained a certificate of proficiency in vernaculars. They could not expect a knowledge of English from Indian students as they expected from English students.

The resolution was put to the meeting and lost, 22 voting for and 26 against it.

Mr. Ramanujachari withdrew his resolution to reduce the 40 per cent. minimum in English examination for the B. A. to 30 per cent.

APPLICATION FEE FOR THE B. A. EXAMINATION.

Before Mr. G. A. Natesan moved his resolution relating to application for the B. A. Degree Examination, the Vice-Chancellor made a statement to show that unless the application fee for the whole examination was made Rs. 4

and 5 for each part Rs. 21-8 the University would be a loser by about Rs. 9,000 if the proposal of Mr. Natesan was adopted.

Mr. Natesan moved the following resolution which would make Regulation 194 read thus :—

"No candidate shall be admitted to the B.A. Degree examination until he has been registered. No candidate shall be registered until he has paid a fee of Rs. 36 for the entire examination or a fee of Rs. 18 for each Part."

He said that in the Intermediate examination candidates were allowed to pay application fees for the compartment. The same privilege must be extended to the B.A. candidates. If the proposed system was adopted there would be loss of revenue to the University. But the general poverty of the students must be taken into consideration. The budget of the University should be manipulated with a little more care and other items of expenditure ought to be cut down. The interest of students ought to be given the foremost consideration.

Mr. K. V. Rangaswamy Aiyangar said that students whether appearing for a part or the whole of the examination should not be asked to pay the same fee in order to prevent the University from going into liquidation. The fees should be levied in proportion to the benefits conferred. The University being a State aided University ought to find Rs. 9,000 in other ways.

Mr. J. H. Stone moved that the matter be referred to a Committee consisting of Colonel Miller, Mr. James, Mr. B. Hanumantha Row, Mr. Natesan, Mr. Littlehales and Mr. K. Ramanujachari (convener) to go into the question as it was a matter of finance, and as there was no Finance Committee for the Senate.

Rao Bahadur Ramanujachari seconded this amendment and Mr. Natesan accepted the same.

The amendment was put to the meeting and carried.

EXAMINATION PAPERS.

The Vice-Chancellor made a statement in regard to the following resolution of which notice had been given by Mr. G. A. Natesan :—

"That it be a recommendation to the Syndicate that no one be appointed to draw up a question paper on subjects which he has been engaged in teaching during the year."

He said that they followed that principle as far as possible this year and tried to appoint examiners from those who had not been engaged in teaching the subjects. At the same time it was not possible to appoint altogether such examiners for it was necessary to associate with them some one who had been actually engaged in teaching as an examiner also, so that the standard of examination might be brought into line with the standard of teaching.

Mr. Natesan said that he came to know of this only after giving notice of the resolution and he would there-fore withdraw it.

The resolution was by leave withdrawn.

SYNDICATE MEMBERS' REMUNERATION.

Mr. Natesan moved the following proposition :—

That the Senate disapproves the practice of remuneration being given to members of the Syndicate for inspection of Colleges, in addition to travelling and halting allowances.

He said that this matter had been engaging his attention and the attention of members of the Senate for over a year and a half and they had felt that the question should be satisfactorily solved. He had come to know of it from a perusal of the minutes of the Syndicate of 1915-16. He read passages from the minutes to show that a special remuneration of Rs. 150 was given to a member of the Syndicate for services which he was expected to render as a labour of love. Those services of the Syndicate member were of an honorary character and such remuneration ought not to be taken by them. Grant of remuneration for such services was a fraudulent exercise of power in legal parlance. The remuneration was more or less fees for services rendered. He hoped that they would no more hear of such things in an extravagant scale from University funds for doing things which they were expected to do as members of the Syndicate.

Mr. Yakub Hassan seconded the proposition.

Rev. Mr. Macphail said that there was nothing in the bye-laws preventing members of the Syndicate from accepting the remuneration.

Mr. Natesan replied that there was nothing in the bye-law permitting those members to accept such remuneration.

Mr. Allen said that it was quite impossible to discuss questions of that sort at a late hour in the evening (7-45 P.M.) He would move that the Senate should pass on to the next business on the agenda. His intention, he said, was not to lurk discussion, but to do it adequately at the next meeting of March. A full house should discuss the question.

On the motion of Mr. Allen seconded by Mr. Statham the debate on this proposition was adjourned to the end of the March meeting.

The Vice-Chancellor ruled out of order the following proposition of which Mr. K. B. Ramanatha Aiyar had given notice :—

"That the further business on the Agenda paper dropped at the adjourned meeting of the Senate on March 10, 1917, be taken up and proceeded with at the next ordinary meeting to be held in October."

The meeting terminated at about 8 P.M.

The Educational Review

A Monthly Record for India.

VOL. XXIII.

DECEMBER 1917.

No. 12.

All literary contributions, books for reviews, newspapers or magazines, sent in exchange, &c., should be addressed to the Editor, No. 4, Mount Road, Madras. Articles and communications intended for publication in the succeeding issue should, as far as possible, reach the Editor not later than the 20th of the month. The Editor solicits contributions on all subjects of educational interest. Stamps should accompany the MS., if the writer wishes it returned, in case of non-acceptance. The Editor can in no case hold himself responsible for accidental loss.

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LANDMARKS IN THE HISTORY OF TINNEVELLY.

By RAO SAHIB PROF. S. KRISHNASAMI AIYANGAR, M.A., M.R.A.S., F.R.HIST.S., of the Madras University.

THE Tinnevely district, as we know it, at present, is a product of quite modern history and may perhaps be dated as such from the time that the rebel Yusuf Khat was subdued and the district was brought under the authority of the Company and the Nawab of Arcot. It assumed its final form after the annexation of the Carnatic by the English in the beginning of the 19th century. This does not mean Tinnevely had not its history. The history of Tinnevely goes back to the earliest historical times and is merged in the history of the Pandyas, who occupied the southern corner of the peninsula from the earliest date known to South Indian History.

The history of Tinnevely therefore would be the history of the Pandyas from the earliest times. The first historical reference to the Pandyas is found, as in fact to the

southern kingdoms as a whole, in the edicts of Asoka. These refer to five kings in South India, among them the Pandyas, on the same footing as the five Greek kings who succeeded Alexander as the rulers of his dismembered empire. It used to be regarded, at least by some historians, as a mere boast of the Buddhist emperor that he claimed political relationship with these. So far at any rate as these South Indian powers are concerned, the extent of Mauryan territory in South India up to the frontiers of the Tamil country seems to be proved more or less by evidence hitherto unexploited. There are references in ancient Tamil literature, in poems ascribed to a Brahman poet of Tamil, known by the name Mamulanar, that Maurya armies invaded South India, and their advance-guard reached as far south as the Podyil Hill, where it received a check from an old chieftain of the Pandya country known in early literature as Palayan Maran. Almost contemporaneously with this incident, we have other references to Aryas

effecting entry by way of the Tulu land and later of their getting defeated by the Tamils in the South Canara country and under the walls of Tirukovilur in the South Arcot district. These enemies are referred to as northern Aryans by the Tamils, and the boundary that separated the Aryans from the Tamil land is fixed at a line extending from Pulikat and Tirupati in the east to the northern frontier of the Tulu country in the west (South Canara). The country beyond is described as a country where language changes, and beyond it lay what the Tamils called Dandaranyam (Dandakaranyam of the Sanskritists). One early Chera is called by the name the Chera that captured herds of cattle from Dandaranyam. It may therefore be taken that the history of the Pandyas in the present state of our knowledge begins with the Maurya invasion of South India by one of the predecessors of Asoka, his father or his grand-father—very likely the latter.

Among the various names that the classical Tamil lexicons give to the Pandyas are three that are of peculiar importance to the district of Tinnevely and they are Korkai-Āli (ruler of Korkai), Kumari Kotpan or Serpan, the lord of the Comorin Hill or Comorin Coast, and Podiya Verpan, lord of the Podyil Hill. These are among the most ancient titles of the Pandyas, and show that in the earliest times Tinnevely was an integral part of the heritage of the Pandyas. There are even traditions which would make the principal capital of the Pandyas Korkai in Tinnevely, Madura being somewhat later.

The history of the Pandyas thence onwards to their practical disappearance about the end of the 17th century falls into three periods, ancient, mediæval

and modern. Of the first period we have but little evidence beyond ancient Tamil literature, the chronology of which is still under discussion. In the early centuries of the Christian Era, the kingdom of Pandya took its rank among the proverbial three kingdoms of the south, the Pandya kings claimed their own share of wars and conquests and patronage of letters. The classical geographers speak of the Pandya country extending from coast to coast beginning from a place in the West Coast they call Neacynda, identified with Nirkunram in the Travancore country. The territory extended through the Paralia (coast country) as they call it to Kumari (Comorin), and beyond to Kolkhoi (Korkai) on the east. These geographers knew of the pearl fisheries of the Gulf of Mannar, the head-quarters of which industry at that time was Korkai. They bewailed the luxury of the Roman ladies, one of the articles of jewelry that they had great fancy for being pearls, some of which should have gone from this port. That position as an ancient sea-port where merchants from all quarters gathered for purposes of trade, Korkai maintained at all times of its history, as the description that is given of the place by the Periplus is repeated practically in the same terms by Marco Polo in the thirteenth century, by his countryman Cæsar Frederick in the 17th century and by Father Martin in the beginning of the eighteenth century. Another place that the classical geographers mentioned is in the Travancore territory now, they call it Balita. It is generally identified with the place Varkalli in South Travancore. Kumari was a holy bathing place then, as it has always been till now, and bathing in the Ganga and Kumari (Ganges and Comorin) is

a holy performance much valued. The other place mentioned, Podyil Hill, has its own sanctity attached to it, as the residence of Agastya, the traditional father of Tamil Grammar, and is a resort to people seeking health as well as people seeking holy merit. During the early centuries of the Christian Era therefore, which may be regarded as the ancient period of Pandya History, we can only say that the Pandya kingdom maintained itself as against its neighbours, and laid claim to the same distinct achievements against the northern Aryas that the other powers do claim. We are able to learn something definitely of two or three rulers but what is known of them is becoming so far traditional and legendary that it is a matter of considerable difficulty to dissociate history from legend. In that period, there was a period of Pandya ascendancy, one Pandya having defeated both the Cholas and the Cheras with their allied chieftains, seven in number, in a place known in Tamil literature as Talayalanganam. It was during this period that the organised censorship and patronage of Tamil literature by an institution, the so-called Sangam, which probably lasted on till the middle of the 7th century, was brought into existence. During all this period Tinnevely is in the happy condition of having no recorded history.

With the middle of the 7th century, we come upon the next period of Pandya history, and upon a number of rulers who go by the name Mara Varman and Jatila Varman alternately, Maran being an ancient name of the Pandyas. The name Jatila seems to have been assumed as a mark of honour, for a benefactor who rid the country of a Canarese Jain, who invaded the country, occupied the capital of Madura, and ruled in place of the

Pandyas. We have about eight or ten Pandyas who were constantly at war with the great Pallavas of Kanchi, who had so far subdued the Cholas, or at any rate, reduced them to the condition of subordination sufficiently, to be constantly at war with the Pandyas on the banks of the Cauvery. In the course of this warfare Nelveli figures oftentimes as a place of battle and this may possibly be Tirunelveli, although one cannot yet be certain about it. At the end of this period, the Cholas rise into importance, and from the rise of this new power the Pandyas do not find relief—much rather they had to carry on war against a more redoubtable enemy. In the best days of the Chola empire, the whole of the Pandya country had been subdued, and, under one of the greatest of the Cholas, Kulottunga I, the Chola authority extended in its fullness up to Kottaru near Cape Comorin, where his inscriptions and inscriptions of his predecessors are found. In order to hold the Pandya country in check and putting an end to the never-ending war, he seems to have planted colonies along the trunk road leading up to Cape Comorin. During the three or four centuries of Chola ascendancy, Madura and Tinnevely were alike under their authority. When owing to a fratricidal war, the great ruler of Ceylon, Parakrama Bahu, sent out an expedition in favour of one of the claimants and against the other, a war broke out between the Cholas, who espoused the cause of the other claimant, and the Ceylonese. From out of this war, the Chola power emerged somewhat weaker than before, and as a consequence, it had to maintain a war against its own subordinates in the empire, among whom the Pandyas played

their own part vigorously. The decay of the Chola power was the opportunity for the Pandyas and while the Hoysalas of the further North marched to the assistance of the Chola rulers as against their feudatories, the Pandyas had to meet them to keep them from entering their own territory. But the fratricidal war that was the cause of the intervention of the Ceylon power came in soon and this time Hoysala intervention was the result, and that was one occasion when the Canarese power marched into the Pandya country. The turn now was for the Hoysalas to come into prominence, and one of their rulers established his capital in Trichinopoly as against the Pandyas with whom he entered into alliance. The Hoysala capital was at Kannanur, the modern Samayavaram, on the North bank of the Coleroon and one of the Pandyas, a Sundara Pandya who did so much for the temple at Srirangam, defeated the Hoysala and carried his war further in the now dismembered Chola empire. Two more generations from him, the Hoysalas had to turn their attention to the North against the Muhammadan invasions which had begun, and the Pandyas had a respite from this disturbance. It was again through the foolishness of one of the rival claimants of the distant Pandyas that Malik-kafur at the commencement of the 14th century undertook the invasion of the Pandya territory. This was only the beginning of the end of the native dynasty of the Pandyas.

It was probably in one of the invasions undertaken by Muhammad-bin Tughlak, perhaps the earlier, a Mussalman garrison was left at Madura which for half a century exercised authority over this region. It was during this occupation of Madura that the

Pandyas, in all probability, found shelter in the more remote Tinnevely to which they retired, and it was probably here that they founded the more modern dynasties of the Pandyas who figure in later history with the old Pandya names, some among those calling themselves Tirunelveli Perumalas.

For half a century this Mussalman garrison remained in Madura undisturbed and in occupation if not of the whole of the Madura district, at any rate of the parts between Madura and Trichinopoly where at Samayavaram they had a cantonment as well.

In the seventies of the 14th century the newly founded Empire of Vijayanagar had so far advanced in power that the rulers who were responsible for its foundation thought it time that they made an effort to dislodge Mussalman garrisons from the South. And this heavy task was entrusted to Kumara Kampana who was at the same time given the assistance of two able and experienced generals and administrators. They are known to history as Gopana, Governor of Gingi, who restored the temple of Srirangam to its former position of importance after the desecration caused by the sack of the temple by the Muhammedans. In this glorious restoration, the other chieftain, the ruler of Chandragiri, probably, Saluva Mangabore his own share of glory, and exhibited his love for his religion as much by deeds of valour as by gifts in charity. During the earlier period of Vijayanagar history, governors were appointed through all the regions where before that time there were Muhammedan garrisons, and earlier rulers. It was during this period that we find Madura being held by a succession of rulers, who figure in inscriptions as Maratti Nandharajayana

of whom two or three names are known. The governors appointed to Madura had charge also of the lordship of the Southern Ocean which must have included the Tinnevely coast where the valuable pearl fisheries were, and under the great Devaraya II of Vijayanagar the foremost man in the empire, Lakkana by name, held this great office. During his time in all probability the authority of Vijayanagar extended to Tinnevely and the Pandya rulers for the time being must have been laid under tribute to Vijayanagar. After the extinction of the first dynasty and when the usurpation came on, they had to carry on wars in the South as well. The father of the great Krishnadevaraya undertook a campaign in this direction. In the early years of the next century a war on this side assumes a more formidable character because perhaps of disturbances between foreign rulers of Madura and the native dynasties holding rule in Tinnevely. It is these disturbances that laid, in the last decade of Krishnadevaraya's rule, the foundation of the Nayakships of Madura under one of the oldest of his generals, Nagama Nayaka. Nagama for some reason revolted, the rebellion was put an end to and the father brought a prisoner before the monarch by Nagama's own son, Visvanatha, who in turn was entrusted with the viceroyalty of Madura, and laid the foundation of the Nayak family. Soon after this there seems to have been an advance by the Travancore rulers into the Tinnevely district, and one of them, Udaya Martandan, seems to have extended his authority right across the peninsula to Kayal on the East coast. His position on this side seems to have been somewhat short-lived, perhaps because of the advance of the Portuguese power. The Portuguese who had landed

on the West coast about the end of the 15th century grew so far gradually in power that they fastened themselves upon Punnaiakaya on the East coast and made themselves masters of the coast district where pearl fishing was the principal occupation of the Parava inhabitants. This seems to have called for vigorous steps from the imperial power of Vijayanagar. The Portuguese held themselves successfully against them for about half a century, and then the inhabitants restored themselves to allegiance to the rulers of Vijayanagar. In the course of these wars the Tinnevely branch of the Pandyas appeared to have suffered in importance, so that under the second or third of the Nayaks, Tinnevely itself became an alternative capital of the Nayaks and the town Krishnapuram was founded by one of them.

Even before this, perhaps earlier than the days of the Nayaks, the capital of the Pandyas seems to have changed from Tinnevely to Tenkasi where a series of Pandyas ruled till about the end of the 17th century, the last great ruler among them being the post-prince Ativirarama Pandyan of the *Nandharajayana* fame. He was followed by a cousin of his, Varatungarama Pandyan, who was also a poet, and by 3 or 4 others whose territory seems to have shrunk to the Western portion of the district and the frontier region of Travancore. Even in the days of Visvanatha Nayaka, we find that the whole of the Pandya territory was divided among a number of petty chieftains perhaps under military tenure. Visvanatha, says tradition, got the 72 bastions of the fort of Madura built by the 72 Palayagars subordinate to him in Madura and Tinnevely. These Palayagars, obedient to authority

The Rose Garden (1864) represents a youth kneeling in front of a lady who is bending over and kissing him. This was intended by Rossetti to serve as the illustrated title-page to his "Early Italian Poets."

In 1864, Rossetti painted his "*Monna Pomona*" in oil and his "*Joan of Arc*" kissing the sword of deliverance, in water-colour and in oil.

The Merciless Lady (1865-6) represents a man seated between two ladies, attending to the singing of the one, while the other is trying in vain to win his favour. There is fine contrast in the picture between the merry expression of one lady and the dejected face of the other, on the one hand, and between the rapt expression and attitude of the man and the frowning and unswerving determination of the lady on the other.

Rossetti made a sheet of six studies for Christina Rossetti's "Prince's Progress" in 1865-8.

The Beloved or "*The Bride*" was produced in oil at this time; and it was re-touched in 1873. This is "a very apotheosis of feminine beauty. It is a purely human conception of the Bride of the Canticles, and has nothing to do with any religious sentiment or interpretation." The bride, slightly removing the veil on her face and proceeding to meet the bridegroom with four attendant ladies of different nationalities standing behind her in a row, and a Negro boy before her with a vase of flowers in his hand, gives a striking conception of a pure-looking Eastern image standing out in bas-relief from a wall decked with minor images of variegated hues, the black little boy serving as a striking contrast to the white Madonna-like face of the Bride, even as a pure diamond shines through a dark medium. This picture may in some respects be called one of the best pictures of Rossetti, and this with "*A Christmas Carol*" may give Rossetti the palm among painters, even if he had not painted his "*Dante's Dream*" or "*Beatrice*." As F. G. Stephens says, "excepting

one or two later works of the master, where sentiment of a more exalted sort, as in "*Proserpina*," inspired the designs, "*The Beloved*" appears to me to be the finest production of his genius."

"*Washing Hands*" bearing on a modern subject, represents the last stage of an unlucky love-affair, where the lady is washing her hands of it and of her lover.

"*The Blue Bower*" was not a large picture, and "had been painted in two months." It represents a female half-figure in a lovely Bower. The figure of the lady is exquisite and vigorous in expression.

In 1865-6 Rossetti drew a portrait of Christina Rossetti, and one of his mother.

The Boat of Love, bearing on a subject taken from a sonnet by Dante, remains as a large oil monochrome, and not painted as a picture.

At this time Rossetti painted in oil a picture entitled "*Il Ramoscello*," and another called "*Monna Vanna*," the latter of which has been a great general favourite. Rossetti in a letter to his mother describes his "*Lady Lilith*" as "the Toilette picture" and "*Monna Vanna*" as "the one with the gold sleeve." "*Monna Vanna*" represents a beautiful lady sumptuously jewelled and attired in the most gorgeous of gold-embroidered robes, and holding outspread in her hand a fan of black and yellow plumage. It represents luxurious ease.

Joli Ooeur (1866-7) is one of Rossetti's excellent single female figures; the figure of the woman is perfectly tranquil and displays happy emotion. She is represented with a sweet, untroubled, natural beauty, which makes this, one of Rossetti's first-rate pictures.

Monna Rosa is also one of the finest of Rossetti's single figure compositions. It represents a standing figure arranging some roses in a bowl.

Tristram and Isolt Drinking the Love Potion was considered by Rossetti to be the best among all his works in water-colour. In few

¹ Fam. Let. Vol. II. p. 182. G. 1.
² Fam. Let. Vol. II. p. 188. B. 89.

other pictures is the fatalistic conception of love so well expressed as in this picture and in "*Paolo and Francesca*." This was one of the exceptionally successful pictures of Rossetti. It represents the scene described by Matthew Arnold thus in his "*Tristram and Isolt*:"

"She who, as they voyaged, quaff'd
With Tristram that spiced magic draught,
Which since then for ever rolls
Through their blood, and binds their souls,
Working love, but working teen."

They did this "unwittingly" and they felt "the fatal bands"

Of a Love they dare not name
With a wild delicious pain,
Twine about their hearts again!"

The fatality of the act is more clearly marked on the faces of both of them, than the mirth which went with the act. The painting has thus great dramatic effect.

"*La Pia*" is a Siennese lady whom Dante meets in Purgatory, and who speaks three lines of imperishable verse in which her wedding-ring is specially referred to. She is slowly done to death by her husband, by being confined in a fortress in the fever-stricken district of the Maremma. The picture is a representation of this lady.

Dante's Dream.—Rossetti's largest picture and one of the greatest pictures of the world and a representative picture of Rossetti's mediævalistic art was produced in 1870. It was sold for £1,575, and was 10 feet by 7. It was so large that it could neither be kept carefully nor carried about easily. All had to content themselves with smaller duplicates. Some kept the original for short periods. The picture passed hands restlessly, until at last it was taken by the Walker Art Gallery, Liverpool, and it hangs there as one of the most valuable possessions of the English nation. This picture which took two years to be painted, illustrates the lines in the *Vita Nuova* which Rossetti has translated thus:—

"Then Love spoke thus, 'Now all shall be made clear
Come and behold our lady where she lies,'

These idle phantasies
Then carried me to see my lady dead;
And standing at her head
Her ladies put a white veil over her,
And with her was such very humbleness
That she appeared to say, "I am at peace,"

In this picture, Dante Alighieri is led in a dream by the spirit of Love to behold Beatrice lying dead. Draped in red, with pinions of the same colour, Love bends forward and kisses the lips, which Dante has never touched. In Love's hand are a winged arrow and a branch of rosemary, and the uplifted pall is full of maybloom. The floor is strewn with poppies symbolical of sleep and through the open doorway are seen glimpses of the city of Florence, which "sat solitary" for the lady's death.

The beauty of Beatrice lying dead in this picture reminds one of Dante's lines:

"Which (her beauty) is above all other beauties even
In so much as befitting One whom Heaven
Sent upon Earth in token of its own."
and "Love needs must say to them he ruleth o'er
'I have lost the noble banner that I bore.'"

The Death of Lady Macbeth, 1870, remains only in the form of two designs, one in pencil and the other in pen and ink. Lady Macbeth rubbing her hands, as if to erase the imaginary blood-stains, and the physician bathing her head, with attendants surrounding her, who is evidently in frantic terror of approaching death, makes this a unique artistic representation of the terrible scene in the drama. Madness and grief are most naturally depicted on the face of Lady Macbeth and the final scene of Lady Macbeth's life is most exquisitely portrayed by Rossetti.

Sketch for "Troy Town" illustrates the same legend as that contained in Rossetti's ballad "Troy Town." In this sketch "Heavenborn Helen, Sparta's Queen" is represented as kneeling "at Venus' shrine"; Venus, with flowing hair, bending forward and looking "on Helen's gift" and saying "There thou kneel'st for Love to life!" and Cupid looking "on Helen's breast," seeing "the heart within its rest," seeing "the

flame of the heart's desire,"—marking "his arrow's burning crest."

The Water Willow (1871), in the background of which is seen the Kelmscott Manor-house, where Rossetti resided some time, is a delicate and quiet-tinted representation of a figure who "is meant to be, as it were, speaking to you, and embodying in her expression the penetrating sweetness of the scene and season," and was one of the decided favourites of Rossetti.

Veronica Veronese (1872) represents a three-quarter figure of a woman in a green dress, seated at a sort of cabinet, holding a violin in the left-hand and a bow in the right, with a cacary in a cage behind her. This picture indicates that "Fine Art is a new and human creation," taking indeed its inspiration from Nature, but using this as a nucleus for a fresh form of beauty,—the two being consentaneous but in no way co-extensive. The song of the bird inspires the musician; she evolves the tune to which her artfully touched instrument gives actual being.¹ This is remarkable, especially when we consider the utter indifference of Rossetti to the art of music, of which he held an opinion very similar to that of Dr. Johnson that of all noises, music was perhaps the most bearable. It is gratifying that such a person has, in this picture, made music, the representative of Fine Art.

La Ghirlandata (1873) or "The Lady of the Wreath" pairs with the former, in glorifying the art of music. It represents a lady singing to the air of her instrument, with two youthful angels rapt in listening to her. This picture may be said to symbolise the fascination of lyric verse, as well as of music.

Proserpina (1874) combines in it personal beauty, intensity of expression and suggestion, and charming execution in which strength and delicacy hold equipoise. The sonnet illustrative of this picture was written by Rossetti in Italian

¹ W. M. Rossetti.

and in English. Here Proserpina is represented in Pluto's kingdom, with her hair all dishevelled and flowing in a careless but beautiful manner, her sorrowful eyes bent downwards, with a pomegranate in her left hand, for the tasting of which, she could no more go back to her own kingdom. She has now felt the effects of her taking "this drear dire fruit" in exchange for the "flowers of Eona." The pathetic repetition of "Afar" in the sonnet strikes the keynote of her sorrow and indicates in her outer sense, what her "inner sense" was "fain to bring." As we look at this type of feminine beauty, we are led to pity the woman enthralled in Hell, for her tasting of the infernal pomegranate, even as we are led to pity Adam and Eve thus enthralled in Earth, driven out of Eden, for tasting of the "fruit of that forbidden tree," "whose mortal taste brought Death into the world and all our woe."

In 1874 Rossetti painted an oil-portrait of Mrs. Morris and a crayon portrait of Mrs. William Rossetti.

La Bella Mano (1875), according to his brother, marks the high-water mark of Rossetti's attainment in point of solid and effective pictorial execution. Rossetti has left a fine sonnet for this picture which represents

"A flower of Venus' own virginity,"

"In royal wise ring-girt and bracelet-spann'd."

The Question (1875) represents Youth, Manhood and Old Age questioning the Sphinx, who, in answer to all, stares blindly and unrelentingly into space. Youth falls back dead, in utter disappointment. In thus representing youth, Rossetti might have meant the untimely death of Oliver Madox Brown, son of Ford Madox Brown, of whom Rossetti, with others, held high hopes. This representation of the nude is unique among Rossetti's works.

Astarte Syriaca is "a truly majestic conception of the Assyrian Venus." The mystery of Beauty is here wonderfully represented

"Mystery: lo! betwixt the Sun and Moon
Astarte, of the Syrians; Venus Queen."

Rossetti has left a sonnet for this picture of mystery.

The Sea-Spell (1876-7) represents, as shown in the illustrative sonnet, "a Siren whose magic song fascinates a Sea-gull ere her human victim arrives." This was first designed as a pendant or contrast to "Veronica Veronese" and to illustrate the famous lines of Coleridge:

"A damsel with a dulcimer
In a vision once I saw."

Passion and fatefulness are expressively represented in this oil picture.

The Blessed Damsel. (1876-7 and 1879) represents the imaginary picture conceived in Rossetti's wonderful and thrilling poem of the same name. The poem was written when he was a boy of eighteen. This picture painted at this late date illustrating the poem, seems to indicate the feeling roused in him by the untimely loss of his dear wife, whose memory was ever haunting him to the end of his life, and with whose Heavenly Love, he now yearned to mix his earthly Love. In this design, the Blessed Damsel is represented in both the situations conceived at the beginning and at the close of the poem, which contains a soliloquy of the Blessed Damsel in Heaven and an imaginary reply to her from the Earth. The Blessed Damsel is here leaning out "from the gold bar of Heaven," standing on "the rampart of God's house." The description of her in the poem exactly corresponds to what we see in this picture. Especially we may note the little figure near her, about whose face her hair falls. Below this we see the Blessed Damsel lying down with her arms "cast along the golden barriers," with her face laid "between her hands" and weeping.

One who looks at this most beautiful picture, side by side with the most thrilling poem will not share in the opinion that "in his later ones we might almost say that everything is over-

intensified, and this finds material expression in exaggerations, amounting to mannerism, as for instance in the "Blessed Damsel" of 1877,"¹ but that this picture alone serves to show conclusively that painting is to poetry what a map is to geography.

In 1878 Rossetti made a portrait of Christina Rossetti and one of Mrs. Rossetti (senior) and Miss Rossetti.

In 1878 Rossetti painted "*A Vision of Fiammetta*"—the only subject he took from Boccaccio, for which Rossetti has left a sonnet, and *Bruna Brunelleschi* representing a majestic brunette. In this year Rossetti also produced a replica of "Dante's Dream" in oil smaller than the original painting, and with a double predella, containing several figures and representing Dante dreaming of the death of Beatrice and afterwards recounting his dream to the ladies who watch over his sick bed, as narrated in the original, from which he drew the whole subject. In 1879 Rossetti made a drawing of "*Pandora*" for which he has left a sonnet.

La Donna Della Finestra (1879) or "The Lady of Pity" represents a lady whom Dante courted for a while after the death of Beatrice, but soon angrily and with self-reproach dismissed from his mind, and turned to unmixed allegiance of heart to his lost Beatrice. The incident is narrated in the "*Vita Nuova*," and Dante says that the "Lady of Pity" is philosophy.

Rossetti made a crayon study for *Desdemona's Death Song* in 1879. In this, Emilia is shown as combing her unhappy mistress's hair, while she sings her last earthly song. In Shakespeare's play, Emilia is not represented as combing the hair of Desdemona at this point, but as listening very sorrowfully to the parting words of Desdemona, uttered by her just before she has to retire to the bed-room in obedience to the orders of Othello. Rossetti's representation lessens the

¹ Easter Art Annual—1902.

gravity and the sorrowfulness of the scene as depicted by Shakespeare.

Mnemosyne (1880) or "The Lamp of Memory" represents a figure bearing close resemblance to the "Astarte." It "is scarcely the realisation of remembrance fallen from heaven," but rather of gloomy memory brooding over the sadness of the past, which no thought of the future alleviates.¹ Rossetti has left two lines for this picture:

"Thou fil'st from the winged chalice of the soul
The lamp, O memory, fire-winged to its goal."

The Day-Dream, for which Rossetti has left a sonnet, is among Rossetti's larger paintings, and is one of those paintings, over which he took most scrupulous care. In writing of the crayon drawing he made for this, in 1878, Rossetti says "The drawing is my prime favourite among all those I have done from my noblest type." The description of the Sycamore which Rossetti gives at the beginning of the sonnet is what he himself observed in his garden in Cheyne Walk.

In the last two years of his life, Rossetti painted in oil the pictures he had already painted, viz., "L. Pia," "Salutation of Beatrice," "Proserpina," and "Joan of Arc."

This completes a short and rapid review of Rossetti's work as a painter. "I believe," said Ruskin, that Rossetti's name should be placed first on the list of men, within my own range of knowledge, who have raised and changed the spirit of Modern Art, raised in absolute attainment, changed in direction of temper." Rossetti's paintings are characterised by a conception of ideal beauty and absolute originality. As Harry Quilter said of him, "In an age when painters have few beliefs, and hold those very lightly, this man scarcely stirred a step in Art except in obedience to his own inspiration, and was strong enough, despite all his failings, to modify the practices, if he did not actually change the creeds, of half the artists of his time." As Rossetti himself often said, he could never be satisfied until he made anything that he took up, the best that he could make. He depicted women's eyes with the utmost delicacy and

beauty. But he always made the necks long and persons tall, as his models were mostly of that type. In this connection we may consider the charge that Rossetti drew his women from very few models, so that there was a certain monotony in his figures. W. M. Rossetti, after an exhaustive treatment of this point has come to the conclusion that this allegation "is not only absurdly incorrect, but it amounts to a depreciation of his Art."² He proves that no fewer than seventeen female sitters are seen in his pictures. Rossetti has often expressed in his own words the method he adopted in his painting and the pains he often took to make his pictures as far as possible perfect. Especially we may note the long letter he wrote to his mother in 1864, in which he explains the pains he took to paint the roses and the honeysuckles in his "Venus Verticordia" from actual objects obtained with great difficulty and at great expense, so that he says, "I have been so busy that I have not been anywhere, except where my picture took me to look for flowers."³

III

While Rossetti was a perfect master in the Art of Painting, he was as perfect a master in the Art of Poetry. "It is thought that Rossetti made poetry subservient to painting. This is erroneous. Rossetti's poems, when they are concerned with his pictures at all, are not mere adjuncts of the pictures; they may, and indeed do, help us to see deeper into his thoughts and creations; but neither is a mere auxiliary of the other, or an exponent of the other's meaning."⁴

"Among English speaking poets of his age," says Swinburne, "I know of none who can reasonably be said to have given higher proof of the highest qualities than Mr. Rossetti,—if the qualities we rate highest in poetry be imagination, passion, thought, harmony, and variety of singing power." Rossetti is a literary poet, a poet writing more or less for poets. His poetry is not easy to understand and he often writes in

¹ *Memoir*, *Fam. Let.*, Vol. I, p. 241.

² *Fam. Let.*, Vol. II, p. 177. B. 33.

³ "Painter-Poets"—Kington Parkes.

a mediæval strain. But there is in his poetry a certain music, a fine delicacy and a grandeur of expression, which mark off his poetry from other poetry of the age.

In Poetry, no less than in Painting, what makes Rossetti so important a figure is that "the Renaissance of wonder culminates in Rossetti's poetry, as it culminates in his painting."¹

The Romantic movement, started in 1798, when "The Lyrical Ballads" struck a new note in English poetry, passing through a generation of lovers of Nature and Beauty, from Wordsworth to Keats, and entering upon a second stage in the combined pictorial and musical handling of Lord Tennyson and the deep lyricism and budding mediævalism in Robert Browning, naturally and logically led to the evolution of Rossetti, Morris and Swinburne, in whom the movement reached its culmination.

Rossetti, the eldest of the new school which has been called "The Neo-Romantic School" is also the best representative of the school. In him, mediævalism, mysticism, love of ornate and elaborate language, pictorial and musical elements in expression and deep lyricism are all combined. He was, in short, as pictorial a poet, as he was a poetic painter.

When Rossetti was nearly five or six years old, he composed three dramatic scenes entitled "The Slave," childish in diction, but correct in spelling and metre. His boyish ballad of "Sir Hugh the Heron," a legendary tale in four parts, Rossetti's first printed poem, composed about 1841, showed "signs of more than common promise." His splendid translations of the *Early Italian Poets*, were commenced as early as 1845. By his 19th year, he had written "The Blessed Damozel," "The Portrait," and the excellent sonnets entitled "Retro Me Sathana" and "The Ochoise." All of them show thorough originality. The poem named "My Sister's Sleep" was composed even earlier than "The Blessed Damozel." Just about this time, he also wrote "Ave," the opening portion of "Dante at Verona," "A Last

Confession," and "The Bride's Prelude." "Jenny" was begun at this time.

"The Blessed Damozel" contains the vision and soliloquy of a virgin spirit in the material heaven of the Middle Ages, tenderly praying, as she looks down from "the rampart of God's House, to regain the lover, who has stayed behind her, that the two may be

As once on Earth, for ever now
Together, he and I."

The description of the Blessed Damozel and the beauty of this early poem of Rossetti alone are enough to justify Walter Pater's remark that "Rossetti is one of Love's lovers."² The Tennysonian influence and the simple stateliness of "The Portrait," the "strain of religious music," which runs through the austere poem "Ave" and "The Prominence of Homely Detail" and the simplicity of "My Sister's Sleep" contrast very well with "the gorgeous dignity of this later work." In the three sonnets which go by the name of "The Choice" we get Rossetti's youthful conception of life.

- (1) "Eat thou and drink, to-morrow thou shalt die,"
- (2) "Watch thou and pray."
- (3) "Think thou and act,"

The principal personage in "The Last Confession," Rossetti said, was drawn from the Italian visitors of the Rossetti household. It was in 1846 or 1847 that Rossetti began the long ballad of "Jan van Hunks," bearing on a tale of chivalry, to which he gave the finishing touch only on his death-bed.

To the early days of Pre-Raphaelitism belong three sonnets which give us a good idea of the new movement. These are "St. Luke—the Painter," "Not as These," and "The Husbandman," now printed together as "Old and New Art." These three sonnets, says W. M. Rossetti, "testify to a highly religious, not necessarily dogmatic, view of the function of the Art, to love of the old painters, and revolt against the more modern ones, and to a modest and yet resolute desire to aid in re-instating the Art in its legitimate place. The spirit which animates

¹ *Encyc. Brit.* Theodore Watts.

² *Appreciations*.—Rossetti.

¹ *Easter Art Annual*—1902.

[DEC. 1917.]

the sonnets is that of a man destined to dare and do, and to overcome."¹

It was also at this time that Rossetti penned those lines about railway travelling, "London to Folkestone," "Folkestone to Boulogne," "At Boulogne—Upon the Cliffs-Noon" (now known as "The Sea-Limits") "Boulogne to Amiens and Paris," and "Paris," which constitute Rossetti's best lyrics and show that he was "bent on the Pre-Raphaelite plan that of sharply realising an impression on the eye, and through the eye on the mind."²

To "The Germ" in 1850, Rossetti contributed "Songs of One Household," ("My Sister's Sleep"), "Hand and Soul" (prose), "The Blessed Damozel," "The Carillon," "From the Cliffs-Noon," "Pax Vobis" now printed as "World's Worth," and 6 sonnets—"A Virgin and Child" for a picture by Hans Memmeling, "A Marriage of St. Catherine" for a picture by the same, "A Dance of Nymphs" for a picture by Mantegna, "A Venetian Pastoral" for a picture by Giorgione, "Angelica rescued from the sea-monster," now known as "Ruggiero and Angelica" for a picture by Ingres, and another sonnet for the same picture.

The most important poems that Rossetti wrote between 1849 and 1853 are, besides those mentioned already "Dennis Shand" a ballad of a rather light kind, not published; "The Burden of Nineveh," "Stratton Water," "Wellington's Funeral," "The Staff and Scrip" and "Sister Helen."

The "Staff and Scrip" was based on a story that Rossetti found in the "Gesta Romanorum." "Sister Helen" was first printed in "The Dusseldorf Artists' Annual." Rossetti called this "a ghastly ballad." But Hake styled it "the strongest emotional poem as yet in the language." This ballad relates a story of Witchcraft. Helen does not love Witchcraft for its own sake; she loves it only as the retributive channel for the requital of a terrible offence.³

¹ Memoir, Fam. Let. Vol. I. p. 144.

² Fam. Let. Vol. III. p. 56.

³ Caine. Recollections, p. 27.

The autobiographical sonnet "Known in Vain" belongs to this period. It presents an indolent man who suddenly wakes up to Duty.

"As two whose love, first foolish widening scope,
Knows suddenly, to music high and soft,
The Holy of Holies; who because they scoff'd
Are now amazed with shame, nor dare to cope
With the whole truth aloud, lest heaven should ope
Yet at their meetings, laugh not as they laugh'd
In speech; nor speak at length; but sitting
Together, within hopeless sight of hope
For hours are silent:—So it happeneth
When Work and Will awake too late, to gaze
After their life sailed by, and hold their breath
Ah! who shall dare to search through what sad maze
Thenceforth their incommunicable ways
Follow the desultory feet of Death?"

For some time after this, Rossetti adhered to Painting as his profession abandoning Poetry. However, in 1859, Rossetti wrote "Love's Nocturn" and "The Song of the Bower"—two lyrics of passion, the former, of fancy as well, which stand at about the summit of Rossetti's lyrical performance.*

In 1861, the "Early Italian Poets" was published. Rossetti wrote, "I want to get my own poems out at the same time as the translations." But this was not done. All the translations contained in this volume were made by Rossetti between his 18th and his 22nd year.

(To be continued.)

N. K. VENKATESAN.

* W. M. Rossetti, Memoir, p. 203.

¹ Fam. Let. Vol. II. p. 161.

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BY

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Professor of Mathematics, College of Engineering, Madras.

Srinivasa Varadachari & Co., Madras.

DEC. 1917.]

THE NOVEL AND THE DRAMA.

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THE NOVEL AND THE DRAMA.*

A COMPARATIVE study of the Novel and the Drama, the one ancient and the other modern in origin and development, possessing many vital common characteristics and also certain marked differences in their appeal and method of treatment, is of absorbing interest to the student of literature. The dramatic instinct being a natural and inborn element in human nature, the evolution of the drama as a form of art can be traced even to the early stages of human civilization in China, Greece and India. The drama attained a very high state of perfection in ancient Greece as early as the 6th century B. C. and the first glorious classical period of the Sanskrit Drama can be traced to the years of the first century before Christ. Compared with this hoary antiquity of the drama, the novel is quite modern, the first faint beginnings of novel-writing in Europe not going beyond the middle of the 17th century. As poetry has generally preceded prose as a vehicle of expression in the literature of all nations of the world, so has the drama forestalled the entry of the novel in the world of letters by several centuries.

It might be stated at the very outset, for a better comprehension of the remarks I would have to make, that the drama, according to certain dominant differentiating characteristics in spirit and workmanship, is divided into the Classical and the Romantic. The differences are largely due to the prevailing temperament, and certain social or literary conventions that have held sway over the minds of those races of mankind. The dramatic literature of ancient Greece embracing the work of Æschylus, Sophocles, Euripides and Aristophanes, of ancient India including the master-

* The inaugural address of the Victoria College Literary Society, delivered by Mr. P. K. Anantanarayana Aiyar, M.A., L.T.

pieces of the immortal Kalidasa and Bhavabuti, of ancient Rome surviving in the few dramas of Plautus, Terence and Seneca, as well as of France embodied in the plays of Moliere, Corneille and Racine, with the exception of Dumas and Victor Hugo, represent the main classical types of drama. On the other hand in the Spanish drama of Calderon and Lope de Vega, in the monumental works of sublime Goethe, Schiller and Lessing in Germany, and in the noble Elizabethan drama whose crowning glory is Shakespeare with the great exception of "rare Ben Jonson," the spirit and method are romantic. The prominent differences between these two types are to be observed not only in the structure of the plot of the plays but in their methods of characterisation and also in the observance of the unities of time and place.

II.

Matthew Arnold's definition of poetry, as "a criticism of life, subject only to the laws of poetic truth and poetic beauty," is capable of wider application so as to elucidate the basic principles of other forms of literary art. The novel and the drama have much in common, because they both deal with the same raw materials, viz., the thoughts and emotions of the human mind. Their themes, treating as they do of widely different aspects of human life, should have a substantial and intrinsic value in themselves, and should be of genuine human interest, if they should rank as works of perennial inspiration and delight. This true value consists in their being vehicles for the expression of human passions, conflicts, problems and struggles that belong to the very texture of life itself, things that make life strenuous, intense and significant. As life is an inextricable tangle of joy and sorrow, they further treat of the comedy as well as the tragedy of life, that is of permanent human interest on account of

their ethical value to mankind. A student of literature very often moulds his thoughts and shapes his actions by the realisation of the moral lessons embodied in these works of literary art.

The true novelist as well as dramatist should, if he is to be the exponent of the moral values of life and its problems, possess "the principle of vision, of sincerity and of beauty." If the writer should succeed in producing a lasting impression and influence on the mind of the reader, he should himself visualise clearly his objects and ideas, he must himself believe what he expresses, and he should have grace to give æsthetic charm to his presentation. "Truth is the aim of literature; sincerity is moral truth, and beauty is æsthetic truth."

If, as regards their materials, there are common basic principles underlying the drama and the novel, there are differences between them that are no less striking and important. The drama is a compound form of art, involving stage setting and representation, and demands histrionic interpretation to bring out its full life and force. It is a rigorous form of art, which sometimes combines with it poetry, music, dancing and other artistic elements, in addition to the purely dramatic. Of course there are in English certain closet dramas that are mainly intended to be read and not acted on the stage; for example *Prometheus Unbound* of Shelley, *Atlanta in Calydon* of Swinburne, *Manfred* and *Cain* of Byron, and the classical dramas of Robert Bridges. Unless therefore we see a drama represented and interpreted by the actors on the stage, we are likely to lose the appeals to the imagination, and to fail to visualise the scenes, to understand the people and to estimate their motives and the moral import of their actions. The novel on the other hand is intended only to be read at

leisure and in the privacy of one's own closet, being free from all those external accessories. It has been appropriately termed "the pocket theatre."

III.

Next we might attempt a general survey of these two forms as works of literary art. The structure of the novel is loose, highly elastic and sometimes very irregular. The very fact that some of the famous novels of Dickens, Thackeray, George Eliot and others appeared as serials in monthly magazines, goes to testify to the loose character of the novel. We have only to imagine whether such a method of writing or publication is possible in the case of a drama. The structure of the drama is far more rigorous which compels the dramatist to keep himself within strict and fixed limits, because it is highly organic.

There is no limit as to the length of the novel. It may extend from a hundred pages of a novelette to about a thousand pages as in some of the novels of Dickens or Thackeray. This almost limitless length and flexible nature of the novel give plenty of chance to the novelist to give his work greater scope and fuller breadth of treatment. On the other hand the dramatist is confined within closer bounds. Though, in the drama also, there are one act plays and three act plays, the usual conventional division of the play has been, in many civilised countries, into five acts, each act being sub-divided into two or more scenes. If we examine the English dramas of the Elizabethan age, we invariably find that the length of a play varies from 2000 to 4000 lines, with a few exceptions. This difference in length is not without its effect on the plot, number of characters, etc., of the two forms.

Another great difference between them is that whereas the novel is objective as well as subjective, the drama is purely objective. The

dramatist, by the very nature of his work, has to eliminate his personality from his play or to keep it in the background, making his characters speak and act for themselves. The novelist, on the other hand, can not only make his personages express themselves, but has plenty of opportunities of acting as a critic or a judge of his own creations. Whenever he finds it necessary, he steps forward and acts as an interpreter, explaining or commenting on the actions or intentions of his characters. This function of the novelist enables him to give his work greater flexibility and freedom of movement.

As works of art, the drama and the novel consist of the same elements. Each consists of a plot or story, characters or *dramatis personæ*, dialogue, a certain time and place of action, a definite philosophy of life, and a distinctive style. It is under these heads that I shall treat the corresponding or differentiating features of these works.

IV

One of the main aspects of our subject that should engage our close attention is the construction or structure of the plot. The plot of the drama demands greater constructive skill on the part of the dramatist than in the novel. Every dramatic story arises out of, and implies, some conflict. It may be a conflict of opposed individuals, of passions or of interests; the conflict may be between the hero and the villain, and sometimes pre-ordained fate or blind circumstance may constitute the force in opposition to the hero. In any case a conflict, an inevitable conflict, forms "the backbone of the plot." The novelistic plot, on the other hand, is not so exacting in its nature. It demands the fulfilment of certain broad conditions. It is a generally accepted principle that the constituent parts of every story should be arranged with due balance

and proportion; the incidents that are narrated should evolve in a spontaneous manner; and the march of events should be so ordered as to make it appear that the final catastrophe is the natural and inevitable outcome of the preceding events. Among the great novelists, conspicuous for their skill in the construction of plots, Dumas might be specially mentioned for the absorbing interest of his stories.

From the structural view point, the plot may be classified into the Loose and the Organic, and the Simple and the Compound. The terms themselves are very expressive. The former lays stress on the greater or less coherence and interweaving of the different parts of the story, and the latter refers to the existence of one or more main threads running through and constituting the story. Thackeray's *Vanity Fair*, a novel without a hero, is a prominent example of loose plot, while Fielding's *Tom Jones* is remarkable for the coherent and organic nature of its plot.

While the novelist is at liberty to adopt a simple or a complex plot according to his requirements, the dramatist is very much fettered in his mechanism by the comparative brevity of his scope, and the consequent necessity to compress his materials, and concentrate his attention on those situations and incidents that would produce the most impressive dramatic effect.

It is in respect of plot that the two varieties of drama exhibit some marked differences. One unique feature of the Greek drama is the simplicity of its plots. It is an inviolable principle of that drama that only a single or simple story, or the culminating phase of a great event, should be selected for dramatic representation. *Prometheus Bound* and *Agamemnon* of Æschylus, or *Atigone* and *Electra* of Sophocles are famous examples of single plots. On the other hand the Romantic drama, setting aside the frigid conventions

of the classic, has tried to embrace within its scope two or more plots interwoven in the same play, by the introduction of episodes or subsidiary incidents. Shakespeare and other Elizabethan play-wrights, Calderon, Moliere, Victor Hugo and others are great masters who, by their adoption of compound plots in their plays, have given a true representation of the complexity of human life and the interaction of human motives and actions. *The Merchant of Venice*, *King Lear*, *Le Misanthrope* are splendid illustrations of plays, whose dignity and beauty are enhanced by the great variety and complexity of plots.

Again in the drama, the necessity of observing the structural divisions of the plot, viz., initial incident, growth, climax, and catastrophe, that should be rigidly introduced in every great play, places a heavy strain on the constructive powers of the dramatist. Closely connected with them are the dramatic unities. You know that according to the classical ideal, the unities of time and place should be strictly observed in addition to the unity of action. To the classicist, unity of action meant a single plot. But the romantic drama has set itself free from the trammels of the time and place unities, and has for the sake of greater freedom concentrated all its efforts on maintaining the unity of action. To the romanticist unity of action means only a close and natural connection and coherence of the parts of the story. These broad differences, into the details of which I do not now enter, should be carefully borne in mind.

V

The next important element we have to examine in our study of the novel and the drama is characterisation. This is, so to say, the flesh and blood of the story, the life-giving and vital factor. The greatness of the novel on the drama, as works of literary art, will ultimately depend upon the strength and

truth of characterisation in them. Unless the men and women, represented in them, become real to our imagination and earn an abiding place in our memory, unless we love and sympathise with them as we feel towards human beings, they cannot be regarded as successful from the point of view of art. To realise this high aim, it requires the power of intense conception and realistic imagination on the part of the author. Referring to the individual and independent existence of the characters apart from the mind of the author, Thackeray said, "I don't control my characters, I am in their hands and they take me where they please."

It may be observed at this stage that, though the interest of the plot forms an essential feature of the novel, unless the incidents of the story are so told as to throw light on the character of the personages, the motives and mainsprings of their actions, the novel is simply "childish and unintellectual." The novelist should always aim at depicting the evolution of character through the instrument of the situations and incidents in the story.

In portraying his personages the novelist has greater scope for a fuller and a more comprehensive development of character, because whenever necessary, he can have recourse to the direct or analytical method of describing them in his own words in addition to the dramatic method of making his characters reveal themselves through their words and actions. He portrays them, by dissecting their motives, passions, thoughts and emotions, and making his own comments on them. Thackeray, the humorist and satirist, generally adopts the direct method; but Jane Austen, George Eliot, Meredith and other modern novelists of the psychological school, show a distinct preference for the indirect method. Whereas the novelist has command of these different weapons, the dramatist is restricted

to the impersonal method only. In his plays the characters have to reveal themselves through their speeches and actions, himself remaining in the background. This necessity compels the dramatist to concentrate on the most effective situations, to lay emphasis on the essential qualities to be brought into relief, and to make every word of the dialogue of his speakers telling and pointed.

Further, the unrestricted length of the novel, its loose structure, the means of personal analysis, these enable the novelist to give greater complexity to his characters and attempt the indication of subtler shadings of passion and motive and exhibit character in the making. So much has this tendency of making "the dynamics of personality" the dominating principle of modern fiction that Henry James, a master of the craft, has declared "the slow shaping of character to be the problem of the modern novel." Meredith, Balzac, Victor Hugo and others have developed this principle in their various modes.

I have already indicated the inter-relation of plot and character. In both the arts they should be closely interwoven, because we often see that the evolution of the plot is based upon the actions of the principal personages, in as far as the motives underlying and prompting their actions are rooted in their very nature. The inseparable connection between them is shown to greater advantage in the drama, in which the play-wright is obliged to reveal the main traits of character through the story's great crises and situations, that call forth the prominent intellectual and moral qualities of the chief characters. Thus we can positively state that the drama, as a form of art, attaches greater importance to the portrayal of character, the story element

being of subsidiary importance. In fiction also, we are more and more approximating the ideal in which, unlike the prevailing method of earlier novelists, the interest of the story is not allowed to overshadow the play of character, but in which the two elements of plot and character are so closely interwoven that they are made to merge into and evolve each other.

A word might also be said about the idealistic and realistic methods as applied to the painting of character in the drama. The classical drama lays stress on the observance in the same play of one mode only, as it aims at preserving the unity of tone. The romantic drama, on the other hand, attempts a combination of the idealistic and the realistic modes of portraiture, and tries to achieve variety of effect by a happy blending of comedy and tragedy. Such a principle would have been deemed impossible, nay, highly inartistic, by the Greeks. But be it said to the glory of the Shakesperian drama that in this, as in other respects, their bold attempt to imitate and embody the complexity of human lives in their dramas has won the approval and appreciation of posterity. If *Hamlet*, *King Lear*, and the *Tempest* are some of the world's masterpieces in the drama, it is in no small measure due to the harmonious intermingling of tragic and comic elements in them. *Faust* and *Wallenstein* in the German drama, *La Legende* and *Le Misanthrope* in French, *Magico Prodigioso* in Spanish, and *Sakuntala* and *Malati Madhava* in Sanskrit are famous examples that mingle the light and the serious, the grave and the gay effectively enough to be true to life.

and *Lucrece* of Victor Hugo, *Sakuntala* of Kalidasa, *Uthararamacharita* of Bhava Bhuti,—the last two partly legendary and heroic plays—might be mentioned as famous examples of plays, that bring to life in all their truth and beauty, the features and tone of past ages.

In addition to this social setting I might also say a word about the function of material setting, especially in the novel. In the works of the great masters, especially of the moderns, nature plays an important part. In the drama, by the fundamental nature of its workmanship, nature can be employed only as a background, and beauties of nature may be indicated by suggestion. Illustrations of such a picturesque use can be found in *King Lear* and *Macbeth*. In the novel, on the other hand, there is plenty of scope for elaborate and set descriptions of nature. From the earliest times, nature has been utilised by writers as a suitable background for the human drama played in presence of it. But the function of nature, as a living agent, actively taking an interest in and sympathising with human beings in their weal and woe, is an essentially modern conception. Nature may sometimes be introduced as sympathising with the sorrows of man or at other times of being indifferent and callous, according to the purpose and mood of the author. In some of the novels of Dickens, Meredith and Thomas Hardy, there are very interesting and effective scenes in which external conditions are made to harmonize with the actions or the mood of the characters at important crises in their lives.

VIII.

The last aspect of our subject I am going to deal with is, what may be called, the inter-

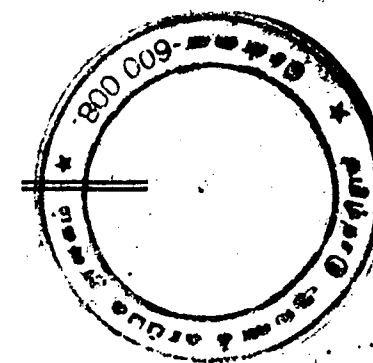
pretation or philosophy of life. For it is a well-known fact that every great literary work embodies a philosophy of its own. As Symonds, one of our sound modern critics, says, "All art to be truly great must be moralized." At the same time, it should be borne in mind that the morality of a work should not be obtrusive or unduly prominent. As a writer aptly puts it, "the ethics of the work must be wrought into the texture of the story, the philosophy must be held in solution." This criticism of life may sometimes be distinctly visible in the individual works of some authors; but in other cases we will have to consider the works of an author as a whole to arrive at the spirit of philosophy underlying his whole work. The author is not only an observer of human life but a thinker about life as well. Therefore he is a moralist in the sense that "he brings a vast body of creative observations in human life, which invite arrangement and disposition into general truths." It is from the method of selection and arrangement of the materials by the author, the way in which he represents character and develops the story, and the emphasis he lays on certain special themes, that we infer his outlook towards life, and then formulate his main thoughts and principles.

The novelist has, as indicated already, this advantage over the dramatist, that he can supplement the moral truths implied and embedded in the body of his work by direct personal commentary or criticism, where he is free to discuss the actions and motives of his characters, and generalize on the moral questions suggested by them. From this point of view the task of the novelist is easier though more comprehensive, and also simpli-

fies the difficulty of the reader in understanding and grasping them. One condition that should be satisfied is that his teaching should be true to life. As he is a creative artist, the truth expected of him is not chiefly a close imitation of life or blind transcription of the facts of life, but the higher truth or poetic truth, which implies fidelity to the great essential motives and passions and principles which mould the lives of men. In other words he should be true to "ideal probability." As Henry James puts it, "A novel, in the broader definition, is a personal impression of life;" and it is according to the sum total of this impression that we receive that we should estimate the genuine worth of the novel.

Among the dramatists I might mention Shakespeare, Goethe, Moliere, Hugo and Ibsen, whose works are invaluable from this moral point of view. Each of them has evolved a philosophy of his own, which in minor points may differ from those of others, but which is at bottom fundamental and one. From this you should not be led to think that each of these great masters has consciously introduced and built up a systematic philosophy in his works. The true test of the success of their art is that it is latent and invisible. As a modern writer says, "Philosophical significance does not imply a philosophical aim." The dramatist is bound, by the laws of his art, to maintain an impersonal attitude, and give his ideas only by suggestion and implication. Shakespeare might be mentioned especially as one, who has achieved the greatest success possible for a writer, by observing both the law of truth and the law of morality. It required all his unparalleled knowledge of human life and its problems, and his marvellous insight into the human heart, to synthe-

size the conflicting elements into a harmonious human philosophy. After all, the genuine greatness of a literary work, whether drama or novel, should be gauged according to the extent to which the high moral purpose of the author, interwoven into his work, is potent enough to influence the conduct of men and women to lead good and noble lives.



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HIGH SCHOOL CURRICULUM.

A MEMORANDUM.

I BEG to invite the attention of Headmasters to the revised syllabuses issued with the Proceedings of the Director of Public Instruction, C. No. 4698-17, dated 15th June 1917, and to state that the syllabuses even in their revised form seem to me to be somewhat heavy and varied in their character for the tender age of the pupils. The lightening of the curriculum is perhaps a very pressing problem and I beg to submit the following suggestions for favour of their consideration.

GROUP A.

(ENGLISH.)

The number of books set for non-detailed study may be limited to three books of from 100 to 150 pages each—one of them being studied during the short term of Form V. These books may be in "simple" modern English well within the easy grasp of the average boy. "The Tales of the Pannjab" prescribed this year has just the flavour and simplicity of style for the standard in view, while "Peeps into Italy" or "A Tale of Two Cities" is hard enough to need regular teaching.

As the pupils of this year's Sixth Form are obliged to work under high pressure, 'any three' of the five books prescribed this year may be ordered to be presented for the public examination to come off in March next. I have said 'any three' advisedly, lest the omission of any particular book should cause inconvenience to schools where it has already been done.

VERNACULAR TRANSLATION AND COMPOSITION
(TELUGU.)

As the scheme stands at present the common paper for Groups A and C seems to need attention.

The vernaculars under Group A having been considerably strengthened, they may be deleted from the C Group, provided some quantity of good standard prose is included in the Telugu Text prescribed for Group A.

If a non-detailed text even in the vernaculars is essential, one book may be prescribed every year, care being taken that the style is simple and idiomatic. The language of Benjamin Franklin prescribed this year for Group A Telugu is, I am afraid, outlandish.

Poetical selections may be arranged in chronological order to show to the student that even Telugu is changing from time to time in structure and idiom like the other living languages of the world.

ELEMENTARY MATHEMATICS.

Decimal approximation, contracted methods of multiplication and division may be excluded as the 'rationale' of the processes is far above the level of intelligence of the pupils.

Equation of payments and the graphical solution of problems on time and work may be omitted under Ratio and Proportion, and Stocks and Shares and Bills of Exchange may likewise be specifically dropped under percentages and its applications.

The proofs of the properties of the Pyramid, the Cone and the Sphere under Mensuration are by their very nature difficult for the average boy; and so are the formulæ for finding the area of a triangle in terms of its sides and the relation between the areas of similar triangles and figures. The construc-

tion of circles touching a given straight line or a circle at a given point may be restricted to two or three special cases involving external contact only. Dividing a straight line in a given ratio may be confined to internal division, and the concurrence of lines through the vertices of a triangle may be specifically excluded.

As for the rest, I would suggest the desirability of issuing a more detailed syllabus for the guidance of teachers and examiners alike.

GROUP B.

The syllabuses framed seem to presuppose a provision of 130 new lessons a year in Elementary Science in Form IV (*Vide* Proceedings R. C. 4698-17, dated 11th July 1917) and 65 in Forms V and VI, and of 130 in the History of the British Empire. This is perhaps double the actual number of new lessons that it is possible to give with due regard to sound work. Out of four lessons a week one period or sometimes two will have to be set apart for "questioning" and "marking."

During the five months of the first term two weeks go for special holidays, two are ear-marked for periodical examinations, and a week or so is usually lost on account of the late commencement of work owing to obvious causes. The number of available periods for new lessons in the long term would be from 40 to 50 and those in the short term 20 to 25, making a total of 60 to 70 lessons during the year. The syllabuses will have to be modified or curtailed in view of the time-limit explained above.

This may conveniently be done in either of the two ways:—

1. The syllabuses issued for Elementary Science and B. History and Geography of the

XXIII

British Empire may be declared to be merely *suggestive* and Headmasters permitted to attempt as much as can be done during the year, the courses of study drawn up being, as usual, subject to the approval of the Inspector of Schools. This would give more latitude to the Headmaster in framing syllabuses to suit local needs and conditions, and fit in with the flexibility of the S.S.L.C. scheme, which is its cardinal feature—no "having" to do anything, but as much as can be done being taught in the best and most educative way possible. Concession of this kind for this year has already been granted (*Vide* Proceedings Dis. 4411 of 1917, dated 20th July 1917.)

2. An alternative would be to lighten the courses on the following lines:—

ELEMENTARY SCIENCE.

From para 4 (1) of the Circular Proceedings No. C. 4698, dated 15th June 1917, it would appear that no change in the Elementary Science Course of Form IV was contemplated. But the syllabuses subsequently issued lay down a definite scheme for immediate adoption. The time hitherto allotted for this subject is 3 periods of 50 minutes each per week but the syllabuses lay down an additional period under this head—*Vide* Proceedings R.C. 4698 of '17, dated 11th July 1917—which is yet to be found. Any curtailment of the time given to English (9 periods) or to Mathematics (5 periods) seems to be undesirable. Drawing is not optional in Form IV.

The introduction of Botany and Zoology in the Secondary school course means not only a certain amount of laboratory equipment but also adequate preparation on the part of the teacher. I had suggested two years ago to the Inspector of Schools, I Circle, that a course of vacation lectures in Botany, Zoology and

Physiology might be arranged for the benefit of Secondary school teachers. Arrangements had also been made for these lectures, but the idea had to be abandoned on account of the war. Before any definite course in the natural sciences—Botany and Zoology in particular—can be introduced as a part of the regular Secondary school course, it is necessary that special vacation lectures with practical courses be organized for the benefit of teachers. A teacher cannot afford to be only a little in advance of his class.

The text-book recommended for Botany cannot be had in large quantities immediately as Messrs. Ginn & Co. have no Indian agents. The book is no doubt, an interesting one, but other books which are equally good—Healey's First Book of Botany (Messrs. Macmillan and Co.) or Fyson's Primer of Indian Botany (Christian Literature Society) may also be approved.

A suitable text-book for Physical Geography such as Carey's First Book of Physical Geography may be prescribed.

The course prescribed for Form VI—Science of daily life includes 'Motor, Relay, Dynamo, Electro-Magnetic Induction which involve costly equipment on the one hand and impose a heavy burden on the pupils on the other. The subjects may be interesting but lose their educative value when the underlying principles cannot be easily grasped. These portions may be dropped from the syllabuses.

The syllabuses moreover are isolated and may be made progressive so that a pupil in Form VI may not forget what he has learnt in Forms IV and V. This is, of course, work that Headmasters can do by themselves.

The idea of alternative courses recommended for the second half of the year in Form VI may be abandoned, and Botany and Zoology made alternative.

Here there may be some difference of opinion. The object of Elementary Science teaching is to give a wide outlook on Nature. The material for study therefore, as is held by many educationists, should be permanently Natural Science—Botany, Zoology, Physiology and Physical Geography—with just the minimum preliminary study of Physics and Chemistry. Physical measurements, Properties of Matter and Heat form a very fitting introduction to the study of all sciences. Consequently the study of the science of common life—Light, Magnetism and Electricity—may well be dropped and the rest of the course spread over three years.

HISTORY OF THE BRITISH EMPIRE.

Work satisfactorily done in accordance with any of the excellent manuals—already approved for use in schools—Kerr's Growth of British Empire, Bowman's History of the British Empire; Anderson and Marsden's History of the British Empire; Highroads of Empire History—may be considered to be sufficient—a concession already granted as a special case this year in Proceedings Dis 4411 of '17, dated 20th July 1917.

These changes will, it is hoped, lighten the curriculum appreciably and ensure proper attention to the B Group subjects.

GROUP C.

The syllabuses originally contemplated by the Board, as I am assured by those responsible for them, were meant for three years' specialised work. "The contemplated course was one of three years' work. For some reasons best known to themselves most Head-

masters have reduced it to a two years' course and then complain of the work to be done. If they would only accept the three years' idea, I think many of these objections would be disposed of automatically." Mr. H. O. Kershaw, 24-5-18 (*vide* also Proceedings Dis. No. 4043 of 1911, dated 31-7-1911 on a reference made by the Inspector of Schools, V Circle, to the effect that the Board does not disallow specialisation in Form IV.). Subsequent experience having shown that it is too early to specialise in Form IV, the same syllabuses are being rushed through in two years, other difficulties remaining the same, such as the "language" difficulty in Form IV, the time required to acquire familiarity with new materials of study, new modes of expression, new methods of approaching the problems under study by observation and experiment and less familiar forms of exercise for the reasoning faculties. Added to all these, there is now the detailed text for Vernacular Translation and Composition. The syllabuses in Group C, therefore will have to be lightened still further somewhat on the following lines:—

C. GEOMETRY AND ALGEBRA.

The Remainder Theorem and its application to factorisation; Homogeneity of rational integral functions; Theory of positive integral indices, in 'Algebra'; and theorems on proportion: Similar triangles, and the construction of a fourth proportional depending on the properties of such triangles in 'Geometry' may be put off to a later stage.

C. PHYSICS.

Bending, vapour pressure, dew point, relative humidity, cooling, total internal reflection, minimum deviation, spectacle lenses are difficult and do not generally find a place

in elementary text-books. They may be postponed to the College course.

C. CHEMISTRY.

Charles' Law, equivalents, estimation of volumes and weights of gases, might be passed over.

C. HISTORY OF ENGLAND.

The special period in Indian History may be separated from C. History of England and presented in future years along with the History of India in outline as a separate C. subject. In view of the improvements effected in the vernaculars under Group A of the scheme, the anomalous combination of "History of England and Telugu" may be discouraged in the case of pupils proceeding to the University, who will do well to present as a second C. subject History of India with a special period, the scope of the special period being defined by the syllabuses already issued by the University.

The study of original sources in English History may be limited to a few select documents bearing on the period prescribed.

OUTLINES OF THE HISTORY OF ENGLAND.

The scope of party Government and Cabinet system, the Industrial Revolution, Reform Bills, Catholic Emancipation and the Irish question, English Foreign policy, distrust of Russia and the Eastern question, the Ministers and their attitude towards the Irish question and the Eastern question; the Act of Union with Ireland;—The 'Stuart Period,' the quarrel between the King and the Parliament, the Protectorate, and the Whigs and the Tories; 'The Plantagenets': the growth of the Parliament may be indicated by recommending a suitable text-book.

SPECIAL PERIODS.

The constitutional importance of Richard's reign; the clauses and effects of the Magna

Charta; Cromwell and Parliament; the extension of the Franchise, Cabinet Government and Municipal reforms, the detailed study of the great Ministers of the period, the attitude of England towards the Eastern question, the Irish question and the attitude of the great Ministers towards the problem, these topics may be reserved to a more advanced stage of study.

The foregoing represents the main changes on which there is likely to be a consensus of opinion and the minimum of concession that in all probability may be made by the Department. I appeal to Headmasters to give these suggestions their careful consideration and to approach the Director of Public Instruction for a sympathetic and favourable solution of these difficulties.

K. S. PARABRAHMAM.

PUBLIC SERVICES COMMISSION.

Mr. JUSTICE ABDUR RAHIM'S MINUTE OF DISSENT.

IN TAMIL

WITH A PREFACE BY

S. KASTURIRANGA AIYANGAR, B.A., B.L.

Editor, *The "Hindu," Madras.*

Price—Rs. 2.

SISTER V. BALAMMAL,
"Vivekananda," Royapettah, Madras.

OUR KINDERGARTEN SONG.

WE'RE merry merry children,
We sing and play and we run
In a nice nice garden :
We'll sing the praise of our school
And hers who o'er us doth rule.

We're ever ever so gay,
Our work is all such a play
That ne'er do we keep away,
Let's sing the praise of our school
And hers who o'er us doth rule.

We read and count the numbers,
And draw such pretty figures,
And shape the clay like potters,
We'll sing the praise of our school
And hers who o'er us doth rule.

Like tender plants do we grow
On us such care they bestow,
We learn all things we must know ;
We'll sing the praise of our school
And hers who o'er us doth rule.

Our school is bright and airy,
Our head is such a fairy
Of harsh words she's so chary
Let's sing the praise of our school
And hers who o'er us doth rule.

She heads the children's garden
She's such a godly maiden
She plays so well the organ ;
We'll sing the praise of our school
And hers who o'er us doth rule.

We're merry merry children,
We sing and play and we run
In a nice nice garden :
We've sung the praise of our school
And hers who o'er us doth rule.

P. R. KRISHNASWAMI.

COTTAGE QUEEN.

(FROM A BENGALI POEM OF
LATE MR. D. L. ROY).

WHEN fiercely booms the lowering sky,
The ground the hailstone patters,
Nature in dismay her eyes doth close,
Lost are the moon, the stars :
Whose the pretty face that peers,
To gloom doth light impart ?
Mine own Cottage Queen is she—
Dearest Queen of my heart.
In dark, in light, in forest or in grove,
In Creation's widest reign,
Whose the smile that floods my heart ?
Whose melody fills my brain ?
Lovely bright does she make
My hut far off and mean,
My heart's beloved treasure is she—
Mine own Cottage Queen.
Under the silvery moon-lit sky
When birds in delight are singing,
Nature intent, in rapture listens ;
A cool breeze is blowing :
Whose the mild and gentle whispers
That in my memory waft ?
Hers they are—my Cottage Queen's—
STAR of my life's chart.
After an age to that cot I go,
Myself therein to seat,
The lips separation so long sadden'd
Will in union smile sweet ;
The voice silenc'd since we parted
Will again in music ring,—
My world's rarest gem is she—
Mine own Cottage Queen.

GOKULNATH DHAR.

SOME STRAY THOUGHTS ON THE PLACE OF MUSIC IN EDUCATION.

VII.

Some seem wiser than they are.

THE common room talk to which I have already referred must have begun in a very auspicious moment—I mean, if at all you believe in auspicious moments. For many days afterwards there was no discussion among the masters but arose from some topic or other immediately connected with music. And even if by chance any other subject happened to be mentioned, it was given such a treatment that it inevitably led to some one or other of the many controversial points as regards music. Or, in other words, as our Sanskrit Pandit expressed it :

आकाशात्पतितं तोयं यथा गच्छति सागरं ।

सर्वं वाग्व्यवहारो हि स्वध्येयमनुधावति ॥

Just as all water falling from the sky flows but into the ocean, all words and acts lead but to the primary subject in your mind.

If one master referred to some "beautiful" lines in Milton, he was confidently told that the poet owed his greatness to his knowledge of music. If another master referred to some rugged lines in Matthew Arnold, he was immediately reminded of the fact that the poet-critic had no ear for music. If the newspaper brought us any report of a criminal case, there was an equally convincing answer. The crime was rendered possible, because you did not teach music in schools !

The opposite party was equally vigilant. If Tennyson was great, it was because of his scientific spirit. If Japan or America was great, it was because of its worship of science. If a boy secured a prize, it was because he

took science as his optional subject. And if both the Madras candidates for the Finance Department were successful, it was because both of them were Physics M. A.'s.

Such was the rage!

* * * *

In rushed the Tamil Pandit with a book open in one hand and the schoolmaster's sceptre in the other—I mean, a piece of chalk. I have already told you that he was not of the ordinary kind of Pandits. He aimed at “East plus West, divided by two” as we used to say. He was a great admirer of the author of the *Crescent Moon*. He was a reformer of the Tagorian type. His voice was silvery and he could sing “as beautifully as a nightingale”—so the English teacher used to say. You may therefore imagine we were all attentive the moment he talked of a Tamil stanza he had come across. I just now forget what *ragam* he sang it in, or whether he made a *ragamalika* of it, but I do well remember the instantaneous effect it had on us. Thanks to the plastic memory of my friend the M. M. I am now able to reproduce it here, but I may warn the reader, however, that my worthy colleague has a very accommodating memory which enables him to have all his quotations adapted to his taste. I hope that my inability to vouch for the correctness of the quotation will not rob it of its intrinsic worth.

‘கலிகால தமிழோர்க்கு எதிகாலை சென்றிடுவர்
காபி உ விற்கு யிடமே;
கவலாது பலபேர்கள் கழுவாத வெச்சில்தனிற்
காத லோ டுண்டு மகிழ்வார்;
தலைபோடு மேலங்கி மேல்க்கி கொண்டிடுவர்,
வாயிலோர் “பீடி” கொள்வார்;
ஹதாசலம் லெமனேடு முயர்ஸோடா நெட்டிடுவர்,
“ஸார்,” “மிஸ்டர்” என்று சொல்வார்;
நிலையிதம் செம்பிதம் தெய்வமிலை யென்றிடுவர்,
சேதமே, “டாம்” “ஹ” யென்பார்;

சேவகா நிலைமையைத் தலைமையா யேற்போ.
கேவலம் பல்வி ளிப்பார்;
அலகிலா புளுகோ டழுக்காறு சுயநன்மை
மோசமுந் கோளுமுடையார்;
பலபாஷை கலவாது மொழியார்கள் கலிகால
யேனையோ ரென்ன விகதை.’

For a minute or two after the song had been finished there was such a silence that you could hear a pin drop.

But then began the criticism. Some praised the matter, some others the manner. Some criticised the sentiments; some others, the choice of words, the verse form and such other things. Many confessed there was much truth in the description, though no two could agree as to which portion was opposed to fact, or was an exaggerated picture.

Mr. V. * * * * who had so heroically kept silence till now ventured to make an unlucky remark which immediately brought a hornet's nest about his ears. He solemnly opined that the Tamil language was not so musical as some other languages he had known. He thought that Telugu, or even Malayalam, was more adapted for songs than Tamil which was according to him the most unmusical and the most inflexible of languages in the world.

Ah, unhappy Mr. V. * * * *! Why did you so precipitously venture to make a remark which you could neither understand, nor substantiate? Why did you try to appear wiser than you were? Why did you get out of your depth? Why did you not in time betake yourself to your melodious test-tubes and odoriferous chemicals? If you had the temerity to make such a remark, you ought to have the dexterity to skulk away unseen!

I cannot describe to you, my dear reader, what a scene there was. As Mr. V. * * * * himself told us later, he felt that but for the

safety afforded by the all-embracing Indian Penal Code, he would have had his last moment then. He had another safe-guard of which, however, he was not aware. We were all men of musical souls—or musical men of souls, whichever you prefer—and we were not destined for “treasons, stratagems and spoils.” We had not the composition of the criminal in us. And what was more, we were all non-science teachers. We had not even that opportunity which Mr. V. * * * * had of negligently allowing any of the pupils to be asphyxiated or electrocuted and being dragged to the court. We were all teachers, pure and simple, with an angelic patience—though our enemies will say “asinine patience.”

“Now run for your life. Both the bells are gone,” cries the latest recruit to our teaching staff. Our throats must surely have pealed louder than the school bell! We never heard the latter. We hastily snatch our pedagogic paraphernalia and rush into our class-rooms with lightning speed.

I have had no means of ascertaining how many boys were the victims of that day's common room discussion.

VIII.

Great wits jump.

* * *

I anticipated that there would be a very lively discussion in the afternoon and so I ordered my lunch from the never-to-be-missed hotel adjoining our school compound. I literally swallowed what was placed in a plate before me without knowing what it was, nor caring to know what it tasted like. I gulped my coffee not minding its being too hot for me and not being then aware of the fact that I was liberally scalding myself. I then made

for the common room as fast as my legs could carry me, assured in the belief that I should be the first to arrive.

But what was my surprise to find the room already full! If I was a “great wit,” they were greater. They had jumped before me.

When I entered the room, I found the central table was literally groaning under the weight of books which had been brought in to aid the discussion. The latest addition to our staff, to whom I have already introduced the reader, was just then reading from one of the books:

“The great plain of the Carnatic is the seat of the Tamil race. Including North Ceylon, the area of the Tamil country is 58,000 square miles, the same as that of England and Wales put together. Of all the Turanian languages, Tamil is probably the most highly cultivated and possesses the richest stores of indigenous literature.”

“Here is another extract,” cried a voice on my right.

“Though Tamil literature, as a whole, will not bear comparison with Sanskrit as a whole, it is the only vernacular literature in India which has not been content with imitating Sanskrit but has honourably attempted to emulate, and outshine it. In one department at least of ethical epigrams, it is generally maintained, and I think must be admitted, that Sanskrit has been outdone by Tamil.”

“Here is a third extract,” said a voice on my left to which side we all turned now.

“Perhaps no language combines greater force with equal brevity than Tamil and it may be asserted that no human speech is more close and philosophic in its expression as an exponent of the mind. The sequence

of things, of thought, action, and its results is always maintained inviolate."

Just then the music master intervened. He pointed out that extracts showing the musical quality of Tamil would be more to the point. "Quite so," cried half a dozen voices at once. The English teacher now came forward and said that he knew of an extract from Whitney, which was accordingly produced.

"The Dravidian tongues, the chief of which is Tamil, have some peculiar phonetic elements, are richly polysyllabic, of general agglutinative structure with prefixes only, and are soft and harmonious in their utterance (Cries of "hear," "hear.") I have been informed by an American who was born in Southern India, and grew up to speak its language vernacularly along with his English, a man of high education and unusual gifts as a preacher and writer, that he esteemed Tamil a finer language to think and speak in, than any European tongue known to him." (Loud cheers.)

I now wonder how we all then kept patient when the English teacher spoke of "phonetic" something. I may tell you that whenever he spoke of "phonetics" we invariably used to answer him with either "fanatics" or "lunatics." We all hated fads, as you and I do so even now. Of course, our reason was cogent and convincing. We knew nothing of "phonetics," nor did we care to know what it was—whether a bird or fish or reptile or plant. What we knew not, nor cared to know must be a fad. We all hated fads. And we, therefore, hated "phonetics" as a fad. Was not our hatred then a logical one?

I am able to make all these observations, since I want faithfully to record how long we

had to wait for another promised extract. At last it came.

"It is not, perhaps, extravagant to say that, in its poetic form, Tamil is more polished and exact than Greek. In its fulness and power, it more resembles English and German than any other living languages." (Loud cheers).

I do not know how many extracts more would have been forthcoming, but I was getting rather impatient of such quotations. So I said something to the effect that instead of quoting critics we might as well quote poets. "Here is one," said I, "for the music of words." It was the first that came into my mind and was offered by way of encouragement to the shy ones of my colleagues.

"இவ்வண்ண நிகழ்ந்த வண்ண மினியிந்த வலகுத்
கெல்லம்
உய்வண்ண மன்றி மற்றோர் துயர்வண்ண முறுவ
திண்டோ
மைவண்ணத் தரக்கி போரின் மழைவண்ணத்
தண்ணலையுன்
கைவண்ண மங்கு கண்டேன் கால்வண்ண மிங்கு
கண்டேன்."

I remember I then explained how these were the words addressed by the sage Visvāmitra to Sri Rama after Ahalya had been brought back to life. I added rather a very free translation for the sake of those illustrious personages who thought that Tamil was below their dignity to try to understand. And finding I had produced some effect on my audience, I wanted to improve upon it, of course, to my advantage. So I immediately followed with another stanza:

"புவியினுக் கணியா யான்ற பொருட்து புலத்திற்
குடி
அவியாத் துறைக டாங்கி யைந்திணைநெறியளாவிக்

சலிபுறத் தெளிந்து தன்னென் றெழுக்கமுந் தழு
விச்சான்றோர்
கலியெனக் கிடந்த கோதா விரியினை கீரர் கண்
டார்."

"Can you show me," cried I with waxing eloquence, "Can you show me a parallel to this in English or in any other of your European languages? Look at the mastery of words! Look at the way in which the words are chosen! Look at the way in which each word is made to do double service!"

I went on to explain the simile comparing the river Godavari to a poet, but before I could finish, there came in the Tamil Pandit. We all instantly held our breath. The mice could play only as long as the cat was away.

But whom was that note for?

I muttered to myself, "why should the— Headmaster want me out of all persons here, and at this particular moment out of all moments? I think it is some extra work." I missed perhaps the finest part of the common room talk that day. To compare lesser me with greater men, I was feeling like Dushyanta.

गच्छति पुरः शरीरं
धावति पश्चादसंस्तुतं चेतः ।
चीनांशुकमिव केतोः
प्रतिवाते नीयमानस्य ॥

My body moves forward, but my heart flies back as if it would break loose, even like a silken banner borne on a staff against the wind.

But ours is to do and live!

* * * * * "MARAT."

RECENT DEVELOPMENTS IN SECONDARY EDUCATION.

SECONDARY education is a subject of no less importance to Government and the Nation just now than to teachers like us in secondary schools. There was a time when in England itself it was considered a luxury and only a preparatory course for collegiate education. But ideas about it have changed now, and it has become the basis of all professional and industrial training even in this country. It behoves us therefore to take stock of the situation, to have the aim clearly set before us, lest teachers and taught should wallow miserably in blind alleys, and the nation's energies should be fritted away in profitless ways. Time should be saved by us and advantage taken of the muddle into which the European nations have been thrown at present. We should try to make headway not only in the industries and trade, but also in all the departments of knowledge and science in which the European nations have excelled us till now. The duties of educationists just now are twofold, (1) to suit secondary education to the needs of industrialists, manufacturers, and traders; (2) to give it such general and elevating character that it would also contribute directly to the development of mental faculties and the training of the capacity for acquiring knowledge and pursuing systematic research work. It is needless to point out in this connection, that in order to discharge both these functions befittingly, secondary education should have the effect of 'softening manners and wearing away uncouthness' and substituting refined pleasures of life for barbarous and offensive forms of enjoyment. Secondary education is the staple food on which should be nourished the captains of industry and the devotees of the decks as well as all the future leaders and generals of the people.

Reviewing the history of secondary education in India therefore, it may be safely asserted that

until 1854, it served only one purpose, namely, to qualify a large army of Indians for holding small appointments under Government, and for doing the duties of drawers of water and hewers of wood. Anglo-Vernacular schools received the hearty support of Government, but the expenses incurred on their behalf, were more than repaid in the shape of cheap but strenuous work rendered efficiently by thousands of Indians in the Secretariats, Taluk Offices and Collectors' Cutcheries. Sir C. Wood's Dispatch of 1854 decided that Government should afford assistance to a more extended and systematic promotion of general education in India. The Universities were established in 1854, and then secondary education assumed a fresh importance in the country, namely, that of preparing students for a collegiate course. But as the work was left more or less in private hands, the missionaries were the first to profit by this policy. The Educational Commission of 1882 laid down 'it is ordinarily expedient to provide the means of secondary education only where adequate local co-operation is forthcoming; and that therefore in all ordinary cases secondary schools for education in English be hereafter established by the State preferably on the policy of grants-in-aid.' Many Government schools in the Presidency were therefore abolished; the remaining schools were mostly mission ones, whose products soon became lopsided in development, being cosmopolitan, atheist or Christian but seldom Indian in religious sympathies. Their *alumni* were wanting essentially in a love of the country and things Indian. The increased share of responsibility under Government which young ambition devoured with greed, the principle of religious neutrality which gave a free measure of success to missionary attempts, and the blind admiration of the Indian youths for the new western sciences and western organisations, all combined together and deprived education of any spiritual or moral influence. Education be-

came chiefly a means of livelihood and it engendered in the minds of the inexperienced a contempt for all indigenous products both of the mind and the hand. Too much regard was paid to the study of the English language and too little for the really useful and scientific studies. Laboratory work and practical mathematics were almost unknown and cram was freely encouraged as a means of acquiring knowledge. The vernaculars and classical languages ceased to be considered as fit vehicles of modern thought and instruction, but were retained as remnants of an old and dying order of education. Still, more and more schools opened, and larger and larger number of candidates matriculated, till at last between 1871 and 1902 the secondary school population nearly trebled itself. Quantity increased at the expense of quality, and now it was that Government woke up.

The recent awakening in the political consciousness of the people has had no small share in altering views as regards secondary education. The Government want now that secondary education should be real and spiritual. They want to standardize it, watch it and guide it in the interests of India and the Empire. The grants-in-aid system is continued but Government would fain set up model institutions and bring secondary education more under their immediate supervision and more in accordance with approved principles of education than before. The recent developments that I refer to here date from 1901 when a Director-General was appointed for the whole of India. It was in 1902 that an age qualification of 15 was set upon all students appearing for the Matriculation examination. It was alleged that this was to prevent cramming and undue haste in those who wanted to matriculate at an early age. It was also to prevent physical deterioration of the school-going population which had become an established evil. Examiners were also instructed

to frame such questions as would test practical knowledge, and the use of apparatus and objects in teaching. The Educational Commission of 1904 emphasised the importance of technical education, and advocated the principle of bifurcation of studies in the upper forms. The Grant-in-Aid Code was revised and rigorous rules followed the Commission's report as regards recognition of schools, maintenance of libraries, laboratories, employment of trained teachers and also the number of pupils that could be admitted into a section or division of a form. The genius of Lord Curzon was in no small measure the cause of many of these improvements. But school fees were raised, and the system of Government scholarships was introduced, replacing the practice of allowing private managements to award free studentships. The argument was advanced that all should not aspire for higher education, but the poor and the weak should be diverted to technical courses and mechanical pursuits and the public service should not be considered as the goal of secondary education.

The country has not had time to gauge the effect of all these reforms, but the rush for secondary education has only increased since then. People have not evinced any very strong predilection for technical study, and perhaps they will not do so until the more profitable industries are within their reach. None the less, the expenditure incurred by Government upon secondary education has been steadily increasing. In 1911 an Educational Member was added to the Viceroy's Council. The old Matriculation was gradually replaced by the School Final Scheme, and secondary education has been taken more or less under the complete control of Government. A Board of experts was appointed and they now not only examine the candidates as the University did of old, but they also determine their courses of study, their text-books, and the syllabuses to be followed. The principle of bifur-

cation was introduced, but its original purpose has been foiled, namely, to differentiate those intended for technical courses from those intended for the University career. What may be supposed as too early specialisation has been the result, the Universities themselves complaining of the bad materials entering their portals. In this connection I should suggest that specialisation should be introduced in the VI Form only, and its introduction should synchronise with the abolition of the B group and other subjects which would be left off in the college. In other words the School-Final class should be considered as a finish to secondary education on one side, and as a commencement of the collegiate studies on the other. Again as regards the School Final Certificate, it should signify not only the fitness of the candidates to specialize in certain subjects, but it should declare also the eligibility of the pupils to enter public service, or follow any other walk of life. The requirements in the two cases should be made different.

Official and Non-official Conferences are the order of the day, but yet the reforms seem to have touched only the fringe of education at present. Only recently, Mr. Yusuf Ali remarked: 'An Indian Matriculate is actually inferior to the boy he was when with his morning face he crept unwillingly to school.' In 1912 the King-Emperor in reply to the address of the Calcutta University remarked: "The formation of character of the scholars and under-graduates under tuition, their moral and religious instruction was still unquestionably the most important educational problem of India." This all-important question still remains to be solved. The suitability of books on morals, or any other form of religious instruction, or the introduction of the conscience clause for the observance of mission bodies, these are all complex but very urgent questions which should be solved in the near future. School-hostels are encouraged, and

liberal grants awarded for the purchase of playgrounds, and thus an attempt is made to regulate and direct the life of pupils by the medium of the school itself. Even medical examination of school-children has been accepted as part of the duties of the Department. It cannot be doubted for a moment therefore, that secondary education receives now much greater attention and financial support than it used to do for many years after the Commission of 1882. But it cannot be doubted also that the increased efficiency in secondary education is not proportionate to the expenses and anxiety felt over it.

What may be the reasons for the same? In my opinion too much importance is attached by Government to the inspecting and controlling agencies, rather than to the teaching section of the Department. Mr. Stone in his interesting Report on Education in the Presidency for 1915-1916, has remarked, 'the inadequacy of the inspecting staff has thrown a considerable burden of work on its members, and I am glad to say that with very few exceptions officers of every grade have sustained it with uncomplaining zeal.' In the light of these remarks I have nothing to say against the heavy work of the inspecting bodies, but as a teacher of 15 years' experience in several high schools, I hold that much of the work of these agents is, to say the least, only a duplication of the work of head-masters, managers or even training schools. Less attention is paid now by them to the organization, equipment, and financial condition of schools than necessary, and a great deal of their time and Government money are bestowed upon what may be called comparatively worthless objects, in view of the very efficient condition of the teaching staff in many of the schools, and the care and control exercised over them by the managements. School Boards might be constituted as in England and uniformity and general supervision may be secured by this means, much more efficiently and cheaply than by the present system. The num-

ber of Inspectors and their Assistants should be diminished and their duties also should be restricted to inspection over the managements of schools for purposes of awarding grants. How often does not the same Inspector inspect a school, and how often is not the same teacher found efficient by the Inspector? It is not even the untrained teacher that is generally examined, but only the permanent and therefore, the trained and certificated ones. Does this not appear quite unnecessary? Is not this waste of public money? The appointment of Personal Assistants to the Inspectors, the increase in the number of Inspectors themselves and other suggested reforms point in the direction of a rapidly extending system of patronage under the Department. The danger is all the more serious, as such a policy will be favoured by both the giver and the taker, in any country. The situation requires to be carefully understood, therefore, by all the responsible and capable ministers of Government and the right direction should be given to the activities of the Department in this way.

The necessity for drafting better materials into the educational line and of maintaining the enthusiasm and credit of the profession was never more imperative than now. The cost of scientific and other apparatus at present, and also the difficulty of getting the same here during the war, have opened the eyes of many thinking people to the uselessness of costly apparatus in general, as compared with efficient and intelligent methods of resourceful teachers. Reforms therefore have to be thought of in other directions. It remains to be seen whether time would cure the evils of the present methods of teaching, and the genius of the nation would evolve a national and soulful method of imparting education in the place of a mechanical and lifeless arrangement. The remark is true that the schools tend to weaken the social ties at home.

Schools should promote a spirit of social service and communal help. A high sense of individual

liberty, consistent however with co-operation and discipline, should be engendered in the minds of the young from a very early age. In the words of A. C. Benson, education should be such that it will produce *esprit-de-corps* amongst a people and enable them to be calm and persevering in times of national peril. Viewing the trend of the educational reforms at present in this light, I am not despondent at all of such a state, when secondary education in India will be placed on a par with a corresponding course in any other country. In our own Presidency the recent changes in the School Final curriculum, the substitution of the History and Geography of the British Empire for Indian History and Geography in the highest classes, and the new elementary science syllabuses are far-sighted and beneficial reforms though hastily patched up. The lightening of the courses in the O. group subjects and the increased attention paid to Vernacular Composition seem to cast a shadow of doubt upon the principle of too early specialization, and in my opinion, authorities may soon be engaged in more important reforms in the same direction. Surely the recent Educational Conference at Simla will leave its own mark upon the trend of educational thought. Compulsory special training for English teachers in secondary schools, and the option to use vernaculars in class teaching may not be the improbable consequences of the Conference. Thus some of the most difficult problems of secondary education have been tackled, and the rest will be mastered also in course of time, to the satisfaction and joy of all. Only, the aim of education, should be kept steadily in view. The energies of Government and the people, of head-masters and teachers should not be diverted into divergent or opposite channels, but should be made to flow smoothly and regularly towards the amelioration of the dumb millions entrusted to their care.

It only remains for me to say here that at the present juncture when secondary education is assuming perhaps a definite and final form for many years to come, teachers of the secondary grade

should have a keen eye on the situation. They should try to give a direction to the labours of official and non-official gentlemen in the field. They should also bear in mind when they set themselves to the sacred task of teaching the ideals of secondary education and the requirements of the Department. They should inculcate in their pupils principles of morality, patriotism and loyalty, through their own examples and through the class lessons. It is only for achieving such worthy ends and also for the purpose of equipping the pupils in certain other desirable ways that reforms should be allowed to be made in the courses of studies, as well as in the methods of instruction. Experiments with no definite hopes of success should not be allowed to be made as in the laboratory upon human frames and human interests, as mere steps to knowledge. But yet this is what is happening in our educational realm, for want of expert advice and professional treatment. It is true also to say that secondary grade teachers as a body lack the initiative and push that may be necessary for such a task. It may be that they want a social status and recognition by higher authorities, it may be also that the best sort of men are not yet in the profession. Sufficient care should be taken however of them by Government and reforms should be effected in this respect also, in a liberal and far-sighted manner. Many are the requirements of secondary education therefore, and urgent are the steps to be taken.

N. VENKATACHARI.

CLOUD MESSENGER.

A Critical Appreciation of Kalidasa's *Meghaduta*.

By RAO BAHADUR M. RANGACHARYA, M.A.,
late Prof. of Sanskrit, Presidency College, Madras.

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THE TEACHING PROFESSION.

IN discussing educational problems, while condemning the system now obtaining in this country, critics, unnecessarily and unjustly, cast a slur on the existing members of this noble profession. In fact, every defect in the educational system of the country is, directly or indirectly, attributed to the inefficiency of teachers who are supposed to be only the fourth rate or fifth rate ability of the country. It is argued that the prospects in the profession being poor, it does not attract able and capable men or the first and second rate ability of the country.

While admitting that the ill-paid, ill-honoured, and much neglected condition of teachers is one of the chief sources of the evils of our present educational system, I have to claim—and I shall attempt to justify it—that it is never true that only persons of low abilities, or persons found unfit for other professions that are attracted to this poor, but noble calling. To speak the truth, it is no question of attraction or repulsion. In most cases there is no choice left to young men, who take their degrees, but who cannot afford to have a costly professional post-graduate education, but to become school-masters, irrespective of their merits and abilities, or their likes or dislikes; it is rather a matter of means; those who are rich continue their education in some of the professional colleges, such as Law or Medicine, and join those highly-honoured and fat-paying professions. A young man who has to choose a profession has also to consider if he has the means to pass through, honourably, the initial periods of starvation incidental to those professions. On the other hand, those who join the teaching profession have their starvation period postponed a little though it continues throughout their life-time. When a school-

master enters the profession he is perhaps single or has only a small family, and his initial salary of Rs. 80 or 40 a month is just able to make him pull through. But when his family increases, and there is greater demand on his income, he finds that his income has not correspondingly increased, and then begins his starvation which lasts throughout life.

Ability, capacity, or intellect is not a necessary concomitant of wealth. As far as my personal experience goes, many of my classmates and school and college-mates, who have been the brightest and ablest among their generation of students, have, by their circumstances, been forced to take up this profession; and among my nine successive generations of students some of the brightest and ablest have become school-masters. I have also heard that some of the greatest men of the country, who have fought their way from low positions to the highest in the land, have, in the long and arduous journey, taken some rest in this profession.

It is true the profession is not attractive and persons who enter it are always on the lookout to jump out into other honourable professions, when they have laid by sufficient money for this change; but it cannot be denied that many continue in it, some for want of wherewithal to change, and others from a pure love of the noble task.

As to the ability and intellect of those in the profession, there can be no better proof than the fact that those who enter this noble calling are men who had the capacity and intellect to master subjects such as Mathematics, Physics and Chemistry; while those who seek other professions take up such subjects as History, Philosophy, etc., which are considered, whether rightly or wrongly, to require less

ability and intellect to master up than do Mathematics and allied subjects.

People who have been, in vain, fighting in the University Examination go out to foreign countries and come back with a number of letters after their names, which are generally considered to have been lightly got, and join either the bar or the medical profession, the two professions which are considered to possess exclusively the master minds of the country.

School-masters are held in supreme contempt by others not because they are wanting in ability or enthusiasm but because they are not the favoured of the goddess Lakshmi, whose smiles are bestowed quite in an unaccountable and capricious manner, but whose graces alone are considered, at the present day, to be the sole test of ability, respectability and all other human virtues.

S. SUBRAMANIA AYYAR.

Lower Secondary Arithmetic

BY

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AND

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CHEMISTRY AND MODERN LIFE.

MODERN Chemistry dates from the time when the Aristotelian views were boldly challenged and new experiments made to disprove them. The stunning blow to the view of this oracle of the Middle Ages may be said to have been dealt by Black when he discovered the presence of carbon dioxide in the atmosphere but strictly speaking, it was Priestley and Cavendish that effectively overthrew the old views and laid the foundations of modern chemistry. Ever since, chemistry has been making rapid progress, and has now assumed such vast importance in human life that it has become a staple part of our education.

With the advance of chemical science, industries have developed at an astonishing rate. A few years back, there were not so many factories in England as at present; nor were the products produced so cheap. This is due to the fact that the value of the bye-products was not understood. As science progressed, the bye-products found a commercial value and sometimes they are now much more cared for than the products for which the factories were primarily erected, for instance, when soda was first produced from common salt—a substance abundantly found both in land and sea—the value of the bye-product, hydrochloric acid was not known. Consequently this was neglected and the gas was allowed to escape into the air. Naturally this was a source of annoyance to the neighbouring villages. To avoid this trouble, this was dissolved in water and the resulting liquid was allowed to flow into neighbouring streams; but this was a source of annoyance, in no way less serious than the previous one. The lively and palatable fish

many imparts a kind of confidence. Also there is the advantage of hearing various types of lessons from various sorts of men. At times teachers are asked to criticise lessons; and this is an excellent practice as long as the criticism is genuine and sympathetic—neither partial nor prejudicial. The authorities also point out the defects of the lesson and the way in which they could have been avoided. Every teacher gets at least half a dozen turns when his merits are judged.

There is a tolerably good library of purely well-selected educational books which the teachers may utilize with advantage. There are various sorts of school appliances such as museum, pictures, relief maps, etc., which are of constant use in teaching.

Over and above giving a practical bent to the mind of the teachers and imbuing them with interest in practice, the Training College enforces every hour the importance of paying attention to such seemingly paltry details as the use of voice, good pens, ink and paper, good desks and black-boards and in short good articles of every kind that are useful and necessary in a school.

In the Training College assemble men from all parts of the Presidency and this close contact for two terms has its own advantages.

Then there are facilities for various games which are common in Indian schools.

To be brief, the teacher is transformed in the Training College. He is equipped with the weapon wherewith he is to fight the battle of his life. He leads a purely educational life for the time he is at the Training College and at the end of the year if he takes the trouble to remember his own self a year ago and compare that with what he is at the end of the year, he will surely find an enormous change.

Are there, then, any reasons why the Training College should be condemned? Pass out of the Training College and join your school again. You will detect why it is so. Between the Training College teaching and the actual work to be done in schools, there is some antithesis. The majority of the present school authorities, to be frank, hardly know what kind of work education is; and if they know it, that is all in theory not to be followed in actual work. Is it then wonderful that there are causes of dispute almost every week between the Headmaster and his trained staff because the one wants quantity, the other quality? And the latter have to yield reluctantly because they are subordinates. The cause of education suffers and that too at the hands of those who are most calculated to promote it.

Hence every real educationist should desire:

1. A hearty co-operation between trained and untrained senior hands.
2. That the gulf between the Training College teaching and the actual school-work is reduced to the minimum.
3. That the time for training should be extended to 2 years so as to derive more solid results.
4. That the work of teachers should be reasonably reduced so as to allow them more time for preparation and that the quality of work may not suffer.
5. That teachers should be consulted on all such points where their opinion and theirs only is likely to be correct.
6. That teachers should have more freedom and less interference in their work.

This is what the Training College can do, if it be given supervisory powers over schools.

G. F. B.

SOME MISCONCEPTIONS IN THE TEACHING OF ELEMENTARY MATHEMATICS IN SECONDARY SCHOOLS.

NO subject has suffered more for want of a definite treatment, aim, scope and method than 'Elementary Mathematics' as prescribed for the S. S. L. C. examination. It is really woeful to note the views held, and the methods adopted, by a few 'trained teachers' re the scope and teaching of the subject, in spite of the syllabus laid out and the recommendations of the Mathematical Association. To them 'Elementary Mathematics' means a subject that requires neither logical reasoning and development nor rigour but one which is a jumble of disconnected principles and results, neither the use of which nor their application could be definitely grasped by the pupils. It is needless to say that any matter that approaches in its treatment to the description given above forfeits its claim to be called Mathematics. Still to such 'experts' Elementary Mathematics connotes nothing but a collection of results, inferences, and mechanical processes of solving a few problems. They fail to recognise that 'Elementary' applies only to the portions of the vast subject that are Elementary as opposed to Higher Mathematics. It does not surely mean mathematics, that is unmathematical in its 'elementary' (?) treatment, devoid of correct reasoning, logical sequence, precision and accuracy. Their differentiation of 'Elementary' from 'Optional Mathematics' is grotesque, if not ridiculous. They assert that in 'Elementary Mathematics' only the barest notions of geometrical truths should be given the boys, not by methods, in any sense mathematical but by what they

choose to call the 'practical' method. They confuse the 'practical' with the 'experimental.' What they mean is the 'Laboratory' method of teaching Mathematics, which no doubt lays much emphasis on the inductive genesis of mathematical deductions. It is simply work with the concrete before passing to the abstract. Surely it has its use and place. All experimental work is only the foundation of the mathematical edifice. It is not mathematics. The utmost one can claim for the method is that it brings into play intuition and common sense to some extent. An approximate estimation, by observation, of the inferences of an experiment is all that it gives. But the pupil's intuition may play him false often, and lead him to accept what is not true. Then it is the teacher's opportunity to introduce the boy in an *informal* and *interesting* manner to *strict mathematical reasoning*. Abstractions and generalisations are the crowning products of which the inferences of the Laboratory method are the foundation-stones. The Laboratory method is not an end in itself, nor is it intended to *eliminate abstract mathematical reasoning* simply as such. Its highest aim ought to be to lead the boy to abstract his own mathematics.

To stop with those inferences of the experimental work, and call it mathematics is what a few teachers do. Such 'experts,' to say the least, should be sent back for training to rehabilitate their views. Let me explain further. To that type of teacher, the intuitive perception of a geometrical truth, say, that a diameter of a circle bisects it, by a paper folding exercise is 'practical' geometry! and the perception is enough and he holds that no more reasoning or generalisation is necessary. Per-

a thing for the gods to laugh at. To establish a line of cleavage between the two, as if one was on the olympian heights and the other in the depths of Hades, is to mistake one's vocation as a teacher of Mathematics. An examination of the detailed syllabuses in Elementary Mathematics prescribed for the London Matriculation, Oxford Responsions, Oxford and Cambridge Senior Locals, together with their examination papers will bring home to any one the scope of the subject. Especially in Geometry no separate papers are set. One paper having two parts A and B, is set, the 'Elementary Mathematics' boys answering only A, the Advanced answering both. Let me turn now to the recent failures, to such a large extent, of candidates in Mathematics. The regrettable failure is not due to any want of capacity in the boys but to a lamentable misconception on the part of the teachers and the methods pursued by them in training the boys. Instruction in Elementary Mathematics has become, for the boy, a prostitution of memory, burdening the memory with results and principles and formulæ, without an organic unity or development. The boy has only a confused notion of several disconnected results, whose application he cannot, and has not been taught to see. The subject becomes a bugbear to him. To summarise, the defects of the present system, obtaining in some schools at any rate, are the following:—

i. There is an absence of proper conception of the scope of the subject and the method of instruction.

ii. The final effect, on the boy, seems to be not giving him a mathematical training which would help him to reason accurately from a given set of premises to the proper conclusion or even think rightly, but of

puzzling him so much as to induce a fear, if not hatred, for the subject.

iii. The boy suffers a double wrong, as the result of the teacher's crime. The period of training, when he should be put in the way, and taught to reason correctly, and have his powers of right perception and correct argument developed, is wasted by the teacher following an illogical method of inflicting unmathematical instruction, vaguely conceived and carried out. The positive wrong comes when, in effect, the teacher warps the boy's growing reasoning faculty for want of proper food and blunts it for want of exercise. Such boys, as do learn Mathematics, however, do so, not because of the efforts of the teacher, but in spite of him.

iv. There is a lack of co-ordination (and correlation) of results taught and principles applied.

I shall in a subsequent article shew how the defects may be remedied, the proper aim achieved by giving a working scheme of correlated lessons in Geometry, Algebra and Arithmetic.

H. NARASINGA RAO.

ALGERNON CHARLES SWINBURNE. (A STUDY.)

"CRITICISM," writes Dr. Johnson in the 60th *Idler* "is a study by which men grow important and formidable at a very small expense. The power of invention has been conferred by nature upon few and the labour of learning those sciences which may by mere labour be obtained is too great to be willingly endured, but every man can exert such judgment as he has upon the works of others; and he whom nature has made weak and idleness keeps ignorant, may yet support his vanity by the name of a critic."

An accurate and impartial study of Swinburne is impossible for many reasons. It was so recent as 1909, after a period of varied activities that 'the fairest first-born son of five who inaugurated a new age of lyric gold' died; since then, an authoritative biography has not appeared and any judgment made on the work of a literary worthy is sure to fail in its purpose if the life is not taken proper account of. Again not many appreciative notices have appeared from the pen of his own countrymen with the exception of a short article which is purely of a personal character by Edmund Gosse in his portraits and sketches and short reviews in encyclopædias and magazines. Views about his ideals and achievement differ among Englishmen themselves. A critic most complacently declares 'that he has not contributed any new thought to the world of literature but has shown to us the capacities and possibilities of lyric poetry! Another hails him as the truest disciple of Victor Hugo and Mazzini and sees in him the best manifestation of political and literary romanticism. A third finds in him the essence of Pre-Raphaelitism carried to the extreme. Under such circumstances, any word from an Indian student of literature is bound to have its own limitations.

Born in 1837, he showed early his intelligence and remarkable power. Lady Burne-Jones gives us a striking description of Swinburne in his

youth. "His appearance was very unusual and in some ways beautiful, for his hair was glorious in abundance and color and his eyes indescribably fine. When repeating poetry he had a perfect natural way of lifting them in a rapt, unconscious gaze. "Looks commercing with the skies" expresses it without exaggeration." Edmund Gosse speaks of his hypertrophied intelligence, vast brain, movements of somnambulist and extreme punctuality. He was a prodigious worker but hated writing down lines and in this he resembled Wordsworth. Of his college life we know nothing except that he contracted the friendship of Morris and Rossetti. His intimacy with John Nichol is of importance to us as Swinburne contributed a few of his articles to the Undergraduate Papers then edited by him. He was thirty years of age when he dawned in splendour on London. By that time *The Queen Mother*, *Atlanta in Calydon* had appeared.

An examination of his poetic ideals better precedes an appreciation of his works. His dedicatory epistle to Theodore Watts-Dutton is an indirect and most unmistakable declaration of his aims and aspirations as an author. It has been very often remarked by critics that he was one of the devoted members of the Pre-Raphaelite movement—a movement which had for its author Keats. The appreciation of the beautiful, the love of poetic truth were the real tests of the early romanticism; but in the hands of the Pre-Raphaelites, the movement came to represent something about painting. The impulse of the Pre-Raphaelite brotherhood was an artistic, not a literary one. Dante Gabriel Rossetti was the nineteenth century Spirit of Art embodied. He is not admired for the contribution, which is little, he has made to literature, but to the artistic representation of poetry. He had all the spirit of mediævalism but he firmly believed that he could present it only in an artistic form. His representation of the Blessed Damozel is very realistic in nature. It is because of this one principle in Rossetti's aspiration that we do not

find his poetry colored either by philosophy, by science or by religion. He paints his characters and they move before him as films in a cinematograph. He had more of the sensuousness of Keats, and lacked much of the finer element of Shelley. It was to this great poet that Swinburne very early attached himself. But his works did certainly outgrow his master. He had all the fine perceptions of beauty in things and a good deal of artistic polish in them. There is no exuberance of false colors, or manifestation of exaggerated feelings. His world was not much of imagination where Rossetti found himself in his element. Swinburne felt he was walking in a work-a-day world. He was a politician, liberal in views and service, a republican by convictions and an idealist by aspirations. Ideas of the French Revolution and the glory of the ancient Roman republic incessantly move before his eyes. In all this he stands distinctly apart from his brethren in the movement; by the method of treatment alone he can claim some kinship with them. There is no touch of dramatic impersonation or imaginary emotion. As Swinburne says of himself "the writer of 'Songs before Sunrise' from the first to the last line wrote simply in submissive obedience to Sir Philip Sidney's precept 'look in thine heart and write.'" His poems were not intended to be the mere metrical echoes or translations into a lyric verse of another man's doctrine. Mazzini was no more a Pope or a Dictator than I was a parasite or a papist. "Dictation and inspiration are rather different things. The poems which followed or preceded them in print were inspired by faith born of devotion and reverence, not by such faith as is synonymous with servility or compatible with prostration of an object or wavering spirit and a submissive or dethroned intelligence." As a dramatist his aim was not to excel his predecessors, nor had he any presumption to say he had done it. His essay on the makers of the English drama is not a condemnation, if it is not an enthusiastic admiration. His ambition was to do something worth doing and not utterly

unworthy of a young countryman of Marlowe, the teacher, and Webster, the pupil of Shakespeare, in the line of work which those three poets had left as a possibly unattainable example, for ambitious Englishmen.

As regards the general characteristics of poetry he is one of those who do not like the principle of setting down rules for metrical construction and prolongation of thoughts. Rules only follow literary achievements and to constrain productions to follow certain maxims which are after all revolting to the taste of the writer should not be preached. Swinburne was very serious when he wrote that "law, not lawlessness, is the natural condition of poetic life; but the law must itself be poetic and not pedantic, natural and not conventional." He wanted to avoid the criminal risk and the capital offence of formality. That he should be recognised as one in the art which aroused the emulous aspiration of his kind, was his essential aim. His condemnation of those who look in books for mere thoughts of others, only nice articles of adornment for library, was unmistakable. It is given to poets alone to realise that books are the treasure-house of the wisdom of the preceding centuries and see in them the moral and intellectual possibilities of man. The poet is a demonstrator—he might have said—in the laboratory of human nature; as such he should of necessity possess some higher qualities than those of the ordinary people.

Poems and Ballads (First Series) published in 1866, represent his early achievements in the field of lyric poetry. The general character of these poems anticipates his hatred for any long sustained work. They are mere spontaneous effusions characterised by youthful enthusiasm without orderliness or discretion:

The sea gives her shells to the shingle
The earth gives her streams to the sea,
They are many but my gift is single,
My verses, the first fruits of me,
Let the wind take the green and the grey leaf
Cast forth without fruit upon air
Take rose-leaf and vine leaf and bay-leaf
Blown loose from the hair,

His *Laus Veneris* represents him as a pronounced sensualist who firmly believed in bodily pleasures. A casual reading of this alone would have even induced the most discreet critic to put Swinburne among the Keatonians, though he was not so. In him the perception of the beautiful is only a corridor leading to the ideal. The beginning lines which are an appeal to the feminine beauty:

Asleep or waking is it? for her neck
Kissed over close, wears yet a purple speck
Wherein the pained blood falters and goes out
Soft and stung softly—fairer for a fleck.

at once become consecrated to a higher purpose of poetic realisation by constant references to Christ and God. Swinburne was not a mystic nor was he a propagandist on religion. His conviction should have been, man was but a result of the mingling of creation and religious influences. Even when he condescends to speak of physical passions like kissing, etc., the note of the higher ideal is always struck:

Lo, she [was thus when her clear limbs enticed,
All lips that now grow sad with kissing Christ,
Stained with blood fallen from the feet of God.
The feet and hands whereat our souls were pricked.

This poem is also important as containing few of the finest passages where Swinburne has exhibited his powers of portrait-painting which was one of the qualities—if not the only quality of the Pre-Raphaelite school:

Her little chambers dripping with flower-like red,
Her girdles and the chaplets of her head,
Her armlets and her anklets; with her feet
She tramples all that wine-press of the dead,
* * * * *
Her beds are full of perfume and sad sound.
Her doors are made with music and barred sound.
With sighing, with laughter and with tears
With tears whereby strong souls of men are bound.

The 'Triumph of Time' is a lyrical outburst on the fatality of human love which is transient in nature and demoralising in character. It bears no fruit anywhere and it is a distinct loss of time and energy to think of passion—which is but "a

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weed of the wave without fruit upon earth." His *Hymn to Proserpine* shows unmistakably his love of heathenism. It is quite possible to infer that this prejudice was partly based upon his love and admiration for the Pagan Rome,—its republicanism, improvements in arts and literature. He considers Christianity as an usurper occupying a place which did honor to some one else:

"Thou art throned where another was king."

He would have laughed outright, at the modern missionary cant that embracing Christianity takes people one step nearer to our ideal. Rome has not benefited much by it and it is doubtful whether other countries can ever hope to gain anything. Most passionately he writes:

O Gods dethroned, deposed, cast forth, wiped
out in a day!
From your wrath is the world released, redeemed
from your chains, men say
New Gods are crowned in the city, their flowers
have broken your rods
They are merciful, clothed with pity, the young
compassionate Gods,
But for me the new deities are barren, The days
are bare.

Swinburne gives us to understand that he is a firm believer in Fate and pre-ordination of God. "Fate is a sea without shore and the soul is a rock that abides". His view of death is not colored either by terror or hatred. There is rebirth and it is only for a 'season in silence that men die.' There is no God found stronger than death and death is a sleep. It is to this same idea, he refers later in his 'The Pilgrims' (*Songs Before Sunrise*):

What light think ye after life to see
* * * * *
Enough of life is this for one life's span
That all men born are mortal but no man
And we men bring death lives by night to sow
That men may reap and eat and live by day.

His pessimistic view of life that it is but a succession of sorrows and that we sacrifice our nobler ideals to such a paltry affair as love is

most pointedly seen in his *Doleres*. His intense attachment and kind words of address to the lady of Pain show to us the higher kind of fibre, Swinburne was made of. He was not a pulpit orator, nor was he a presumptuous proselytiser. His religion was God, a cosmopolitan religion and his world was humanity, not the narrow circumscribed England. It should appeal with equal force to the extreme Puritan as well as to the bigotted Roman Catholic, to the Red Indian in America and to the Vedantin in India. Though he was not a seer in the domain of literary artists, that he was always the true child of honest convictions which in fact moved and moulded his life and character cannot be disputed. It might have been that he at times, vehemently preached as though he was the self-styled adjudicate of man in all spheres of life, it was also true that he advocated certain things without supplying a programme or a solution for their accomplishment, equally true it may be that he was carried away by enthusiasm in his judgment but to condemn him as having been insincere in his expressions is certainly unpardonable. He believed in Christ, in God controlling the human destinies, in Fate, in rebirth; it is not his fault if he has not given us a metaphysical explanation of God or a psychological study of man as always aiming at the highest ideal. He never advocated a policy of boycotting all worldly pleasures but he always reminds us that there is a goal, an inevitable goal, which should be reached by man and that there is a temporary silence in human activities by Death. His pessimism of life appeals to me more as an optimism which works for the salvation of mankind by extending to us constantly the fears of Death and the nobler ideal of reaching God. His reasons are obvious:

For the crown of our life as it closes
In darkness, the fruit thereof dust;
No thorns go as deep as a rose's
And love is more cruel than lust.

The note of the *Ballad of Burdens*: "Life is sweet but after life is death. This is the end of everyman's desire" is the essence of his religion. This philosophical interpretation of love being regarded as more cruel than lust and that sorrow being considered as a surer path than pleasure to reach Him, and the courting of sorrow, is common with all the poets of Swinburne's type. Sri Rabindra writes in a similar strain in *Gardener*:

"Pleasure is frail like a dew drop: while it laughs it dies. But sorrow is strong and abiding, let sorrowful love wake in your eyes. The lotus blooms in the sight of the sun and loses all that it has. It would not remain in bud in eternal winter mist."

"*The Two Dreams*" makes a good psychological study of the sensual aspect of human nature. The dreams bespeak the intense love of the lady for her lord. The whole story has the flavour of a mediæval romance and the characters partake much of the qualities of Keats' *Isabella*. Enduring the loss of her lord in peace, abiding in fellowship of pain, dying of pure wasted heart and weariness for love's honor in her love's distress, the sentence that was written upon the tomb "Here dead she lieth, for whose sake love is dead," all remind us of the most pathetic picture of *Isabella*—

She forgot the stars, the moon, the sun
She had no knowledge when the day was done
And the new moon she saw not, but in peace
Hung over her sweet Basil evermore
And moistened it with tears unto the core.

* * *
She withered like a palm cut by an Indian for
its juicy balm.

"*Faustine, The King's Daughter, the Bloody Son, May Janet* do credit to the influence of the Pre-Raphaelitism over Swinburne. As has already been stated, the poet moderates excessive romanticism with a touch of the mental conflict, or a storm in the human soul. In '*Love at Sea*'—a short poem, we have a most direct application of this principle. The

closing lines, short but sweet, define clearly the attitude of the poet towards life. "Land me where love shows but one shaft, one dove, one heart, one hand—a shore like that lies where no man will steer." "*A Christmas Carol*" suggested by a drawing of Rossetti's, is a piece of intense philosophic charm and lyric grandeur. The flowing verse and the unobstructed move of the ideas make it one of the very good poems of his "*first series*." His verses to Victor Hugo exhibit the high esteem in which Swinburne held him. He was really a god, a spiritual messenger "who shed splendour from his place of soul" on Swinburne.

For thee! man's spirit stood
Disrobed of flesh and blood,
And bare the heart of the most secret hours
And to thine hand more tame,
Than birds in winter came
High hopes and unknown flying forms of powers
And from thy table fed and sang
Till with the tune men's ears took fire and sang.

His lines to Walter Savage Landor "the royal and released soul" were not less hearty. "Come back in sleep, for in the life where thou art not, we find none like thee."

His unspeakable enthusiasm for a life in the sea, his ready similes drawn from the movement of waters, its vast expansive character, were always a source of inspiration to him. He rejoiced in the word of the sea as a mother's that says to the son she bore "child, was not the life in thee mine and my spirit the breath in thy lips from of old?" Son of the sea he was, and son of the ocean he continued to be.

Songs before Sunrise and *Songs of two Nations* essentially belong to the realm of Politics. It is here the most impressive personality of the poet is felt and the best of the poetic qualities come out. A republican by convictions and sympathies, he felt that neither monarchy nor oligarchy has any place in the world. It is true that he derived his inspiration from Italy—from Rome—the seat of the Republican institutions. The contem-

porary continental politics influenced him a great deal and gave him further impetus to hold strong to his views. In his *Dedication to Joseph Mazzini*—the father of Italy, he writes,

If a perfume be left, if a bloom
Let it live till Italia be risen
To be strewn in the dust of her car
When her voice shall awake from the tomb
England, and France from her prison
Sisters, a star by a star.

Love of liberty was the basis of all his vehement appeal. Here he deliberately dresses himself like a rebel and his poems have the effect of turning passive citizens into uncontrollable revolutionaries. He felt the cause for which he was writing was noble. Tyranny, constitutional monarchy, modified absolutism, oligarchy, were the words which were not found in his dictionary. As he says he sets the trumpet to his lips and blows 'liberty, freedom, equality.' How can he think of a Russia without scorn and disgust. He pleads 'swift revolution' and 'serene republic.'

His passionate address to the dear-life-springs of England in the '*Eve of Revolution*' cannot be read without pride. The poem *A Watch in the Night* is a good caricature of the spirit of the European countries which are not moved by the fire of republicanism. Democracy, liberty and equality should be attained at any cost and Swinburne even advocated violence if that is a sure and swift method of getting it. All the Romans are asked to muster in opposition to the government. The glory of Italy, the spirit of the nation and the intellectual fire of imagination and lastly the firm belief and trust in the work of the dead chiefs are sure to get success for the people. Any coward who lags behind has no place in the nation:

Woe is ours if we doubt or dissemble
Woe if our hearts not abide
Are our chiefs not among us we said
Great chiefs, living and dead
To lead us glad to be led?
For whose sake, if a man of us tremble
He shall not be on our side,

Swinburne in his eloquent declaration that Italy should lead the world, does not forget the mischief which the Roman empire did. All the same, Swinburne's palliation is historically true. Though Rome killed the freedom of others, she allowed them to grow under her banner.

Happy are all they that follow her
Them shall no trouble cast down
Though she slay them, yet shall they trust in her
For unsure there is nought nor unjust in her
Blemish is none, neither rust in her.

"Cities made free should ring to the roar of the lion proclaiming republican Rome." His attitude towards Rome was one of unstinted praise, and for everything good Rome always supplies him with matter. In his song 'Blessed among Women' he pays a glowing tribute to "Rome's highest and sovereign daughters, Portia Verturia, Arria and Cornelia. In the *Litany of Nations*, he makes the nations speak of their past and present political development. Russia has a bad history to give and England says that she was at one time among the chosen. He directs the reader to think of The Commonwealth as the glorious era in English History:

By the star that Milton's soul for Shelley's lighted
Whose rays enshrine us;
By the beacon light Republic far-off sighted,

France takes credit as having been the standard bearer, the voice and cry of Republicanism.

Swinburne was a socialist. He to a certain extent believed that labour should be the basis for holding profit. He sympathises with the bitter cry of poor men that faint for bread, with the sightless souls and fleshless limbs that labour not for their fruit. What right has a master to have another human being as his slave? Why all cross winds of defeat and of disaster? Is there not the freedom of the natural soul and that one seamless coat of Christ? Capitalists "bind with iron people's nail-pierced hands and hide the people's nail-pierced feet." Swinburne says in *Before a Crucifix*:

These have not the rich man's grave
To sleep in when their pain is done
These were not fit for God to save.

An Indian student of literature can hardly go further without being reminded of his own situation. As even Swinburne struck the trumpet call of liberty to Italy to come out from her slumber; so also our national poets have done. Mrs. Sarojini Naidu, the patriot-poetess of India wrote:—

O, young through all thy immemorial years!
Rise Mother, rise, regenerate from thy gloom,
And like a bride high mated with the spheres
Beget new glories from their ageless womb.
The nations that in fettered darkness weep
Crave thee to lead them where great mornings break

Mother, O mother, wherefore dost thou sleep
Arise and answer for thy children's sake.
Thy Future calls thee with a manifold sound
To crescent honors, splendours, victories past
Waken, O slumbering Mother, and be crowned
Who once wert empress of the Sovereign past.

Swinburne should have felt great joy at the proclamation of the French Republic. It was his mission to preach republicanism and at last it was fulfilled. His congratulatory salutation to France is at once pathetic as it is inspiring:

O torn out of thy trance
O deathless, O my France
O many wounded mother, O redeemed to reign
* * * * *
O singed at last and perfect without spot or stain
Light of the light of man
Re-born a republican
At last, O first Republic hailed in heaven again
Out of the obscene eclipse
Berisen with burning lips
To witness for us if we looked for thee in vain.

His hatred of Austria and of Ferdinand II and of the rule of the clerical autocracy is seen in the Dirge "A Dead King." He is spoken of as having been made up of the foul flesh of a beast and as the priest has no more prayer to sell there is no

room in heaven for Ferdinand. He should go down to hell.

Among his dramas we can consider *Atlanta in Calydon* and *Mary Stuart*—the former being classical and the latter romantic. *Tristram of Lyonesse* does not pretend to be a story and the poet himself says that it was the last kind he ever thought of undertaking as regards this poem. It has been often charged that *Tristram* and *Iseult* do not represent ordinary human nature and that their actions are incongruous. Swinburne's explanation puts matters out of doubt. "Both heroes belong to the same impossible age of an imaginary world.....After all, the active men of the actual age of chivalry were not all of them mere muscular machines for martial or pacific exercises of their physical functions and abilities. Each has an equal right to reason in the pauses of action and philosophise in the intervals of adventure." The portion of the poem headed *Iseult at Tintagel* must be of special interest to all Indians. It is the picture of an adulterous wife, having learned wisdom, appealing to God to accept her lord in heaven. Though loose in her character once, her love for him does not cease and the innocent husband equally loves her. She repents for all her sins, and her final prayer is not to separate her from him. The boon is granted and by a magical process *Iseult* turns to be a maiden in a marriage bower. This sudden metamorphosis reminds us of the character *Chitra* in Tagore's *Chitra*—where the all-innocent girl demands from God, a touch of earthly beauty in her face which may help to push on her object in view. It is quite possible for us to interpret every part into a separate machinery of symbolism.

Atlanta in Calydon is a small tragedy—a real tragedy in the Greek sense of the term. *Meleager*, son of *Althea*, queen of *Calydon*, brings about his own downfall by committing a great blunder in killing *Althea's* brothers, which excites the anger of his mother. She at once takes the

brand which measures her son's life, casts it in fire and dies. The reason for the murder of *Althea's* brothers is the sending of the spoil to *Atlanta*—daughter of one *Arcadian*—as one beyond measure enamoured of her—after putting to death the wild boar which ravages the whole country set up by *Artemis* in revenge of the king of *Calydon* who has not done the usual sacrifices to her. *Meleager* also dies by slow degrees.

As an English tragedy on the Greek model this comes next in importance to Milton's *Samson Agonistes* in point of literary finish and artistic expression. The conversation of *Meleager* with *Althea*, immediately after his birth, stands in strong contrast to the speech he delivers after killing her brothers. The motherly solicitude to govern the life of the child is no longer the case. The sisterly affection for the deceased brothers works itself and a mother has the heart to say:

That is my son, my flesh, my fruit of life
Meleager, a fire enkindled of mine hands
And of mine hands extinguished; this is he.

The final speech of *Althea* before she takes away her own life is manly in temper and sentiment. *Meleager's* life and end are pathetic. *Atlanta* is a good character with all the feminine charms.

Though a comparison with *Samson Agonistes* is very tempting, it is impossible for obvious reasons. The revenge, the venom and mal-intentions which mark almost every character are due to the fact that the story is based on two sects of people who are deadly enemies. Besides, the Biblical basis lends a certain amount of grandeur to the general feature of the story which an ordinary legend cannot give. Again in *Atlanta* there are not many opportunities for the evolution of characters. It is on a very simple and short story that the tragedy has been foisted while the question of *Samson's* life or death means a nation's welfare or disaster. Lastly the Miltonic verse with its majestic move takes the poem

into higher regions and leaves it par excellence, the English classical tragedy.

A word about the literary merits of his poetry in general. It shows a wide range of subjects and when Swinburne sincerely feels, we have telling lines. The metre so effectively adjusts itself that the intended result is always gained. As a ballad writer he stands supreme among the nineteenth century poets, as a sonneteer, his place is fairly high. His sonnet on *Love and Sleep* is really Shakespearian. Energy, rapidity and fire, says Hugh Walker, are the natural characteristics both of his metre and diction. His great credit is that he is never obscure and his style is characterised by directness and force. Neither as a descriptive writer, nor as a poet of human nature nor of any intellectual depth, he has any high place. It is as a lyricist that he holds his position. His comparisons come from Nature's experiments in the wide sea. As a painter of domestic life, he has to a little extent succeeded in *The King's Daughter*, and *The Bloody Sun*. The organized lyric movement of his verses is felt greatly in the *Halt Before Rome*; his *Cradle Songs* (to a tune of Blake's) are remarkably good. Though as a dramatist, he had not given us satisfactory productions, as a dramatist on a classical model he has fairly established his name. His other drama *Mary Stuart* which is Elizabethan in structure and plot construction fails to effect the pleasure of a well-planned romantic drama. Compared with minor authors of the Elizabethan era on whom he bestowed all praise, his dramas too can hope to claim some credit. The two scenes *Mary Stuart at Solway Firth*, and *Mary Stuart at Chartley* are good enough to catch the romantic temperament of human nature. But the great fault we perceive is that the author does not aim at a deliberate attempt to give scope for characters to develop themselves. There is a dull monotony about their speech and movements and once we hear them, they do not interest us for a second

time. Even the great figure Mary Stuart does not demand our admiration as a character in a drama though her plight makes us take an intelligent interest in her affairs. Another defect was to put long speeches in the mouth of characters which will not certainly keep the audience in touch with all the events of a drama.

It will be improper to close the study of Swinburne without making mention of his achievements in prose. Among his prose works stand foremost *Essays and Studies*, and *A Study of Shakespeare and William Blake*. His one sole purpose of literary criticism was to do the greatest service to the literary men who have sunk in oblivion. His firm belief should have been that every author is greatly indebted for the services of people that had gone before him. The growth of literature is only possible by gradual and slow processes. No one—let him be a genius for the matter of that—can at once evolve a drama with distinctly individualistic ideas, unique formation of the story, and a quite novel presentation of characters. It is by nature impossible. Even the great master mind Shakespeare had to bend to his predecessors in the field for having given him ideas.

His criticisms are marked by enthusiastic praise. There is no room for calm and deliberate judgment. It is not a real literary study of an author, but a regular shower of praise. Comparative study of authors is quite foreign to Swinburne and every man should stand and be judged by himself. 'As for me,' he writes in his *Essay on Victor Hugo*, 'I am not careful to praise or dispraise by comparison at all. I am not curious to enquire what of apparent or of actual truth there may be in any charge brought against the doer of the greatest things done, the giver of the greatest gifts given among men in our times. Goethe found his way of work mechanical and theatrical. Milton also lived to make oblique recantation of his early praise of Shakespeare, yet none the less they are great men.'

Swinburne in the introductory note to his *Essay on Rossetti* writes "that in every generation that takes any heed of the art, the phrase of 'the greatest living poet' or with a difference of reservation 'first of his age and country' is flung about freely and foolishly enough." If that was true, Swinburne was the greatest sinner in this respect. Instances are not far to seek. To him the style of Mr. Rossetti excels that of any English poet of his own day. In his *Essay on The Death of Jason*, he pays a glowing tribute to Morris—there is no one among the contemporary poets who can compare favorably with Morris for perception and expression of tragic truth, of subtle and most piteous things. When he speaks of Wordsworth's "incommunicable, immitigable might," he writes "there are many men greater than he, there are men much greater; what he has of greatest is his only." His vehement vindication of Byron against Matthew Arnold drives him beyond all bounds of good decent literary criticism.—"Byron's depths and heights of inner and outer music are as divine as nature's and not sooner exhaustible. He was alone the perfect singing-god, his thoughts, words and deeds all sang together." Of the play 'Arden of Feversham' he oversays the merits. "None of its successors has surpassed it in its vivid representation of facts. Its unquestioned triumph lies in its portrait of Alice Arden; no other evil woman in the drama before Lady Macbeth is comparable to her in verisimilitude." He names Ford as one of the landmarks of English Poetry. This tone of a determined defence for all the little merits makes him blind to the other aspects of his poet's activities and from beginning to end, there is a regular flow of congratulations. These result in making his sentences lose all attempts to say soberly what he wants to say. An enthusiastic declaration can never be silent judgment: consequently it leads him liable to the great charge of verbosity and indiscretion.

His three main canons of criticisms are the divine purpose of poetry, music of the poet and song of liberty. Even if there is the slightest

inclination in a poet, Swinburne at once raises him to the heights of gods and makes him deliver his spiritual message. Says he of Victor Hugo, "There is nothing in this work of a heavenly kind, yet or it may be because every word has in it the vibration of earthly emotion, but through it rather than above, there grows and pierces a note of divine tenderness, the very passion of pity that before this has made wise men bad. There is the echo of all emotions of a great patriot and a poet working for the salvation of the poor of the country.... Victor Hugo is the supreme singer of childhood; of its works and ways, its gladness and sadness, its earthly weakness and heavenly beauty, its indefinable attraction lying deeper than all reason can sound or analysis resolve." Dante Gabriel Rossetti to him is an "intense heat of spiritual fire, there is a sovereign unity of perfect spirit and sense. The translation of the *Vita Nuova* is a mature work of kindred genius and spirit." Matthew Arnold's *Requiem* is in his eyes the best flower of his genius. In it there is "a serene spell, a sad supremacy of still music that softens and raises into wisdom the charm of earth and sorrowful magic of things everlasting." Swinburne fully believed that success or achievement of an exalted kind on the spiritual side ensures and enforces a like executive achievement in technical beauty of his work. "There is no such thing as a dumb poet or a handless painter". Arnold is great as he makes difference and draws a line between religious tradition and the religious idea as opposed to Philistine demolition or to Philistine edification. Even in Ford, he sees the casual divine idea of beauty which falls as though direct from heaven upon stray lives.

To conclude, Swinburne's place among the nineteenth century poets cannot be easily determined. To class him with Browning would be the greatest literary blunder and a positive insult to the great mystic. Nor to couple his name with Shelley is justifiable. In Swinburne there

is no definition of God, no direct path shown to us. His is a manly, secular and direct interpretation of religion. In this, he approaches Carlyle. Of his contribution to the English literature we have not many words of praise. His intellect was only of an average type. His mission was to preach republicanism and the divine element of all things. It is left to us and to our posterity to judge his influence. His political ideal is gaining ground and his socio-religious gospel still remains to be assimilated by John Bull. He had the unconventionality of a man of genius. A writer in the *Saturday Review* gives us a funny episode. "He hated hard work and enjoyed exercising his gift for invective. Of the Third Napoleon he was madly abusive and we can

easily believe Prof. Holland's reminiscence. "I will recollect his dancing round the table, screaming abuse and I think advocating the assassination of the Emperor."

We cannot better close the essay than by quoting the judgment of Edmund Gosse: "No one did more to free English literature from the shackles of formalism, no one among his contemporaries pursued the poetic calling with so sincere and resplendent an allegiance to the claims of absolute and unadulterated poetry. Some have turned preachers, others have been seduced by the attractions of philosophy, but Swinburne always remained an artist absorbed in a lyric ecstasy. He was a singer and not a seer."

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CALCUTTA UNIVERSITY COMMISSION QUESTIONS.

1. Do you consider that the existing system of University Education affords to young Indians of ability full opportunity of obtaining the highest training? If not, in what main-respects do you consider the existing system deficient from this point of view?

2. Do you consider that University training at its best involves—

(a) that the students should be placed under the personal guidance of teachers of first-rate ability and of recognised standing in their subjects;

(b) that the teachers and students alike should have access to well-appointed libraries and laboratories;

(c) that there should be a large degree of freedom of teaching and of study; and

(d) that the teachers should have sufficient leisure to be able to pursue independent investigation in their own subjects?

If you share this view as to the functions of a University, do you consider that the ideal is attained or attainable under the existing system in Bengal? If you hold that the standard indicated above cannot fairly be applied, please explain your reasons for this conclusion.

3. What resources exist in Calcutta for the formation of a great centre of learning such as other cities of comparable size possess? How far are these resources organised to serve this purpose? What changes, if any, and what expansions would you suggest?

4. (i) If you have studied the Dacca University scheme, have you any suggestions to make with regard to it?

(ii) Do you think that Universities on the lines of the Dacca scheme, or on other lines, could, with advantage, be established at other centres of population within the Presidency, either now or in the future? If so, what centres do you suggest?

5. (i) What, in your view, should be the relation between the University and Colleges

situated (a) in the University town; and (b) in other centres of population in the Presidency?

(ii) How would you propose to ensure that every institution at which students are permitted to follow the course for a University degree is adequately staffed, and adequately equipped?

(iii) To what extent do you consider it possible to grant to Colleges some degree of freedom in the design of their courses and, under proper safeguards, in the conduct of the examinations of their students for University degrees?

(iv) Should it be found practicable so to organise the intellectual resources of Calcutta as to create a powerful centralised teaching University in that city, how would you propose to deal with Colleges not incorporated in that University? Would you favour—(a) the creation of a new controlling body to regulate the studies and examinations of such Colleges, or (b) the maintenance as far as possible, of the existing system, or (c) the establishment of a new kind of relationship between the University and such Colleges, which would allow some autonomy to the latter?

6. What are the callings and professions which are necessary for service to, and the advancement of, India, and for which a high degree of training is required? How far do the special needs, and the traditions and characteristic powers of India differentiate her requirements in these respects from those of other regions and notably from those of Great Britain? How far are these requirements met by the University and how far should it be within the province of the University to meet them?

7. (i) Should the University provide or recognise approved courses of instruction in applied science and technology (including such departments as engineering, agriculture and commercial science) as qualifying for degrees or diplomas or both? Should the University also provide facilities for research in these branches of knowledge?

(ii) Do you think that higher technological training should, or should not, be segregated from other branches of higher education?

(iii) If, in your judgment, various branches of applied science and technology should be recognised as departments of University teaching and research, (a) what safeguards would you suggest in order to secure that every University student of applied science and technology should also receive adequate training in pure science? (b) what relations should be established between the University and technological institutions including those which have at present no connexion with the University organisation?

8. Are you satisfied with the present conditions of admission to the University of Calcutta and, if not, what changes do you suggest?

9. We desire to ascertain the views of our correspondents as to the use and abuse of examinations with special reference to the educational opportunities and needs of Bengal. Will you favour us with your observations on the following points:—

(i) Whether, in your judgment, there is validity in the criticism that, in the existing University system, teaching is unduly subordinated to examination?

(ii) Whether an attempt should be made to reduce the rigidity of the examination system and, if so, whether you consider that the use made of examinations might be varied to meet the needs of different subjects of study and of different groups of students in one or more of the following ways:—(a) the teaching might for certain purposes be defined, as at present, by prescribed examination requirements, (b) the teacher might be left with a maximum of freedom and the examinations be adjusted to the course given by individual teachers, (c) in some particular subjects or sections of a subject, though teaching might be given, there might be no test by a formal University examination.

(iii) The limits within which examinations may serve as a test of fitness for a specific career, e.g., the professions of medicine, law, teaching and engineering; agriculture, commerce and industry (including the aspects both of management and of scientific guidance and research); and admission in the public service.

10. Have you any further suggestions to make as to the improvement of the existing methods of the University examinations?

11. (i) Do you hold that English should be used as the medium of instruction and of examination at every stage above the Matriculation in the University course?

(ii) (a) If your answer to (i) is in the affirmative, do you consider that University students have on their entrance to the University an adequate command of English?

(b) To what extent do you think that English should be used as the medium of instruction in secondary schools for those students who are being prepared for the Matriculation?

(c) Are you satisfied with the kind of training now given in English before entrance to the University? If not, what improvements do you suggest?

(d) Would you draw a distinction, both in school and University, between practical training in the use of the English language and training in the study of English literature?

(e) Do you think that the Matriculation examination in all subjects should be conducted in English?

(f) Do you think that English should be taught to all students during their University course and, if so, what kind of teaching would you advocate for those students whose general course of study may be other than linguistic?

(iii) If your answer to (i) is in the negative (i.e., if you think that English should not be used as the medium of instruction and of examination at every stage of the University course above the Matriculation), what changes would you recommend, and at what stages in the University and pre-University courses?

12. Do you think that the University should do more than it now does to encourage the scientific study of the vernaculars of the Presidency? If so, what changes do you advocate?

13. Are there any branches of science or learning not now represented in the curricula of, or not actually taught in, secondary schools in Bengal, and the University of Calcutta or

its colleges, which, in your judgment, it is of importance to introduce?

14. What, in your judgment, should be the relations of the Government of India and of the Provincial Government to the University or Universities of a province such as Bengal?

15. Do you hold it to be advantageous or the reverse, (a) to the public services, (b) to the students, (c) to the progress and advancement of learning, that University examinations should be regarded as the qualification for posts under Government? Would you advocate the practice, adopted in many other countries, of instituting special tests for different kinds of administrative posts under Government?

16. What steps would you recommend for the encouragement and stimulation of independent investigation into Indian and other problems among the alumni of the University? Do you hold that the chief root of such work must be the existence of a widespread and genuine intellectual curiosity among the students? Do you consider that the existing system creates and develops such curiosity?

17. Do you consider that the conditions under which many students live (a) in Calcutta, (b) elsewhere in Bengal, are such as to undermine traditional morality and family ties, or to be deleterious to the character and physical health of the students? If so, to what causes do you attribute this, and will you suggest the steps which, in your opinion, should be taken to secure for the students wise guidance in matters of moral principle and of personal hygiene; protection against injurious influences; fuller opportunities for physical exercise and training; and the discipline and comradeship of corporate life?

18. What is your experience as to the health and physical development of students during their University career in Bengal? Have you any reason for thinking that the present system imposes an undue physical or mental strain upon students who are not exceptionally robust? If so, please suggest remedies.

19. Will you contribute any suggestions arising from your experience regarding the organisation of residential arrangements for students, including hostels, messes and lodgings? In regard to hostels and attached messes will you discuss especially—(a) the relation of these institutions to the University and to the colleges; (b) the functions and status which you would give to the Superintendent; (c) the methods of management, control and inspection; (d) the proper equipment of a hostel, including kitchen and dining-room arrangements, provision for the treatment of illness, library facilities, etc.; (e) the best size for hostels; (f) the desirability of their providing tutorial assistance? In dealing with these problems we beg that you will have careful regard to what you deem to be financially practicable.

20. Do you consider that the financial resources already available for higher education in Bengal are employed in the most economical way? If not with a view to the strengthening and expansion of higher education, can you suggest some form of University organisation which, while securing economical administration, would make a more powerful appeal for support from private liberality as well as from public sources?

21. Have you any suggestions or criticisms to offer with regard to the proposal that the University (and such of its constituent colleges as may desire) should be removed to an easily accessible site in the suburbs, with a view to facilitating—(a) an expansion of the activities of the University; (b) the erection of suitable buildings for colleges and residences for teachers and students; and, generally, (c) the growth of corporate University life.

22. To what extent do you consider that the needs and interests of particular communities should be specially considered—(a) in the government of the University, (b) in its courses of study, (c) in its residential and other arrangements?

23. (i) Are there any points in which your answer to the foregoing questions would be

different in respect of the needs of men and women?

(ii) To what extent and in what fields, are additional and special facilities for higher education required for women?

(iii) What are the peculiar difficulties and needs which affect the higher education of women in India?

Reviews and Notices.

THE HISTORY OF BRITISH INDIA, PART I, VOYAGES OF DISCOVERY AND EARLY EUROPEAN SETTLERS, BY C. S. SRINIVASACHARI, M.A. (MODERN PRINTING WORKS, MADRAS). Price: Rs. 12.

We welcome this book, which has been written with a view to meet the needs of the students who have to appear for the S. S. L. C. Examination of 1918. The whole period which, as is well known, is very meagrely and unsatisfactorily dealt with in ordinary text-books, is treated with a skill and a sense of proportion characteristic of one who is a master of the subject. Mr. Srinivasachari's book contains 4 chapters. The first of these deals with the old trade routes between India and Europe and the causes which led to their decline in the period of the Renaissance. The second chapter has for its theme the series of explorations made by Portuguese, Spanish and early English and Dutch heroes with a view to establish trade relations with the East. The third chapter deals with the Portuguese in India between 1500 and 1600, and the last with the rivalry between the English and the Dutch. Every chapter is almost complete by itself and the student is placed not only in a position to understand clearly the circumstances of the rise, growth and decline of early European attempts, but also the true and correct historic perspective of them. The style is occasionally perhaps above the standard, but with a little explanation on the part of the teacher there is likely to be no difficulty. We believe that the book will have the popularity which it richly deserves. A word of praise is due to the *Modern Printing Works* for the excellent get-up of the book.

INTERMEDIATE TEXT-BOOK OF ENGLISH LITERATURE, BY WYATT AND LOW, PART I. THIRD EDITION: REVISED AND REWRITTEN. (UNIVERSITY TUTORIAL PRESS). 4s.

The writing of a suitable text-book of literature is no ordinary task. It involves the putting together of various talents. It has first to be a chronicle giving sufficient and accurate information. It has further to furnish concise, well-worded and attractive criticisms, of authors and works and in such treatment it has obviously to allure the student into the vast and refreshing domains of literature, guiding him with sober and still a positively engaging introduction to great names and master-pieces of literature. A good deal of biographical detail needs to be embodied in all literary chronicles. But the most useful text-book for promoting literary taste and learning will carefully discriminate in the choice of biographical details deserving of narration.

The present volume is from all the above considerations well-schemed and well-executed. The personal element has however been restrained, which is inevitable in such a text-book. The volume runs to about 450 pages and covers the story of English literature up to the Restoration in 1660. Though only the first part of a series the book is provided with a very welcome Index.

A feature of the scientific character of the criticisms in the book has been the offering of useful analyses of literary currents of different times. Whether of the qualities and metre of Old English Poetry, or the peculiar genius of Chaucer or in the elucidation of the characteristics of metaphysical poetry, or for the matter of that, in the instance of any important literary impulse, the authors have not fought shy of making an honest and laud presentment of the essential details. As examples of the thoroughness of the work we may instance that 36 pages are devoted to Chaucer and 37 to Shakespeare.

We welcome the present volume as coming in this time of dreadful war whose features it reflects in stray analogies.

"A literary captain of a modern merchantman after his adventure with a German submarine could not write a more straightforward and succinct account of what happened to him."

The book is singularly suited for College and University purposes. Its very unassuming plan

increases its usefulness and there are also two companion anthologies published for use along side with the history.

● 'CIVICS,' BY M. K. SUNDARAVARADACHARI, B.A., WITH A FOREWORD BY THE HON'BLE MR. JUSTICE T. V. SESHAGIRI Aiyar. (GANAPATHI & Co., PERAMBUR). Price: Re. 1.

This book which is written in very simple, homely and chaste style and which gives an excellent description of the Indian citizen, his duties and obligations, his rights and privileges, is an eminently suitable text-book. The author proceeds from the family and its place to the central government at the top of the political machinery and gives the right proportion to the various departments of the State. The organization of every department is clearly described, and statistics are given. On the whole we have not come across a book which, in such a small size, satisfies all the requirements of the student of civics, and we heartily recommend the book for introduction in schools.

STUDENT'S HISTORY OF BRITISH RULE IN INDIA (1757—1857), BY C. B. ABUVALA, B.A. AND N. B. ABUVALA, B.A., BOMBAY. Re. 1-12.

This book has been written to answer the needs of students of the Intermediate Arts Examination, Bombay University. It is in the form of questions and answers. The questions are intelligent and comprehensive and the answers full and detailed. The students will be in a position to understand the real importance of events and further have the advantage of the knowledge of standard-writers on the subject. We consider the book to be eminently suitable to those advanced students who have to study the British period as part of general Indian History. The printing and binding of the book is not satisfactory.

SANSKRIT RESEARCH—VOL. II, Nos 2 and 3.

This journal is continuing its great service to the cause of scholarship. One of the most interesting articles in the double No. is that of Mr. P. Jagannathaswami on the *Text of the Gita*, wherein he brings in a number of arguments, textual, structural, metric and philosophic, to show that the Gita is an interpolation. Prof. Lawrence Mills, of the Oxford University, contributes a paper on *Yasna*

XXXIV in its Sanskrit Equivalents, which must be appreciated by the Pahlavi and Sanskritic students. Rao Bahadur K. Krishnā Iyengar then writes on the *Essentials of Indo-Saracenic Architecture* under the various heads of mosques, tombs, palaces, etc. A paper by Dr. Samey on the *Medical Practice in India* and another by Mr. G. K. Sane on a *Short Review of Indian Logic* close the number. The Sanskrit section contains an article on *Nyāyakhyaṭi Vimarśa* by Pandit Sripada Sastri and three others. Each article is erudite and the journal is keeping its high level of solidity and brilliance.

A HANDBOOK OF ELEMENTARY MATHEMATICS, BY Mr. P. R. SUBRAMANIA IYER, B.A. (ST. JOSEPH'S INDUSTRIAL PRESS, TRICHINOPOLY.)

This is a book of about 180 pages divided into two parts. The 1st part contains the S.S.L.C. public examination question papers 1911—1917, the solutions of these questions, and some artifices employed in solving arithmetical problems. In the 2nd part is a large number of exercises based on the recent S.S.L.C. papers. Many of the questions are taken from the various public examination papers. The exercises are choice, quite suited to the standard of the S.S.L.C. examination and are 250 in number. The book contains some printing mistakes which, we hope, will be corrected in the next edition, and also shows signs of having been got up rather hurriedly. In p. 80, Q. 14, g^2 , must be g^2 , 892 must be 893. If contracted methods are used throughout, the working can be reduced; since the answer is to contain 2 significant figures, it is enough if 3 figs. only are kept in the work. In p. 45, Q. 4, there is no mention of the scale employed. In p. 50, Q. 1, in contracted division, in some cases, only one figure in the divisor is left unscored, sometimes two; in the course of the work, Italian method is adopted for some steps and not for the others. In p. 61, Q. 11 the question "How much later will the children arrive at school.....?" is not answered. Still any student who carefully works through the exercises in the booklet, can face the examination with confidence, and the book is sure to gain popularity amongst the students.

THE INDIAN SCHOOL BOOK OF VERSE: SELECTED AND ARRANGED BY E. STOKES, B.A., I.E.S. PARTS I & II. (LONGMANS, 1917.) 10 As. & 12 As.

We have in these two small volumes an excellent collection of English verse exactly suited for the

purpose the compiler has had in view. It is not common in books meant for use in India for the compilers to go in for extracts from any but classical pieces,—and the result has been that the young ones in the lower classes of our schools have had to be taught selections in which more often than not the little fish talks like a whale. Mr. Stokes has followed in the wake of sensible reformers in England, and has provided for Indian students a selection of pieces which does credit to his discernment. In the first few pieces in Part I Mr. Stokes has done well to mark the major pauses, and has avoided the overdoing of the thing,—a fault, so far as Indian students are concerned, was one reason for the unpopularity of the once famous 'Royal Readers' of Messrs. Nelson.

FEDERAL AND VOCATIONAL EDUCATION, BY
I. L. KANDEL, M.A., PH.D. (BULLETIN 10
OF THE CARNEGIE FOUNDATION FOR THE
ADVANCEMENT OF TEACHING, 1917)

This volume sets bare the tortuous course of agitation in the United States for legislative sanction for aid being given to vocational education out of Federal funds. The events of 1862, 1890 and 1907 are set out in detail, the constitutional and educational precedents for Federal aid being invoked are described and examined, and a short resumé is given of recent movements for securing federal grants for education. Mr. Kandel has added statistics about Land Grant Colleges and students of agriculture and of Federal aid given to the Colleges of Agriculture and the mechanic arts and agricultural experiment stations and has also given abstracts of the curriculum of agricultural colleges.

The present work is very useful,—at least to etable educationists and public men in India to compare what our Government has done for agriculture with what the Federal Government of the United States has done for what in that country does not claim half the attention that we in India have to bestow on it. From 1862 to 1916 not less than a sum of 5,876,838 dollars has been voted out of Federal coffers, to supplement what each State has paid from its own resources.

We commend this able report to the attention of all our public men, to the various agricultural associations, and especially to those officials who

seek to secure the permanence of the present system of Indian administration for the benefit of the masses of this country.

CARLYLE ON THE SIGNS OF THE TIMES AND CHARACTERISTICS, EDITED BY R. D. RANADE, M.A., PROFESSOR OF PHILOSOPHY, FERGUSSON COLLEGE, POONA. SECOND EDITION. 1917. (MILFORD : BOMBAY) Rs. 1-12.

We have great pleasure in commending to our readers this very workman-like production. Without overshooting the mark we may say confidently that no annotation of any English classic by an Indian has reached the level of excellence attained by Mr. Ranade in the present work,—of course, and always, excepting that excellent work of Mr. Rantala Venkatasubba Rao,—'Othello Unveiled,'—and the able dissertation of Sir N. Chandavarkar on Wordsworth. The critical review that Mr. Ranade has prefixed is exceedingly well done—being a good digest of almost all that has been said of Carlyle's work, and the Notes that follow are accurate and do not ramble away from the point. We cannot help, however, remarking that Mr. Ranade's Review and Notes lack the suggestiveness that ought to characterize an annotation of the work of so thought-provoking a writer as Carlyle.

STORIES IN VERSE, SELECTED BY V. H. COLLINS, M.A. (CLARENDON PRESS, 1917). 1s. 6d.

Mr. Collins has confined himself to the minor poems, having in view young pupils of the forms. His principle has been to exclude even descriptive poems 'unless the description is markedly subordinate to action.' Those who have cultivated acquaintance with his selection of 'Poems of Action,' and 'Poems of War and Battle' will find the same discernment exercised in the present selection also. Such a cheap selection also of longer stories in verse as the present one is will sell like hot cakes, for Herford's 'English Tales in Verse,' in the judgment of many, was nothing but an attempt to make an essay of about forty-five pages worthy of buckram and gilt.

The Educational Review.

We extend our cordial support to the appeal that has just been issued for the starting of a national college at Trichinopoly. The idea has been in the air for the last several years and we are glad it has assumed practical shape at least at present. The city of Trichinopoly has not awakened a day too soon to a realisation of the great need there is for the establishment of a national college where Hindu youths might have the privilege of being trained in an atmosphere of reverence for their religion and special stress will be laid upon what constitutes the essential elements of Hindu culture and civilisation. From a statement of the details of the scheme which we have perused, we find that the organisers are modest and have also a keen eye on efficiency. That the idea has been inspired and is worked by such a veteran educationist as Professor K. Sundararaman, who combines in himself high character with great scholarship augurs well for its success, and we hope that the Hindu community of Southern India will respond to the appeal with a liberality, consistent with the ideals of educational charity they have inherited from their ancestors. Apart from the considerations that undoubtedly necessitate the formation of a centre from which Hindu influences may radiate in all directions in the city of Trichinopoly the serious question of want of accommodation in the two existing

colleges there has got to be faced. In spite of the hundreds of students who seek admission into the two overcrowded colleges that already exist there, a large number of young men are driven to the painful necessity of knocking from place to place in their frantic efforts to secure the benefits of higher education. We hope that at no distant date, we will have the privilege of congratulating the Hindu Educational Trust on the establishment of a high class first-grade college in that historic city of the South.

By virtue of her commercial importance and leading position among the cities of Asia, A School of Economics and Sociology Bombay is in a pre-eminently favourable position for the starting of an educational experiment in the direction of inaugurating a School of Economics and Sociology. A practical scheme for the opening of such an institute has just been placed before the University of Bombay by a Sub-Committee consisting of the Hon. Mr. C. H. Setalwad, Dr. R. Scott, Sir Narayan Chandavarkar, the Hon. Mirza Ali Mahommed Khan, Dr. Harold Mann, Mr. Lallubhai Samaldas, the Hon. Principal Paranjpe, Mr. Natarajan, Sir Stanley Reed, Professor P. A. Wadia and Professor H. Limaye. The object of the school will be to promote the study of Indian social institutions, with reference to their effects on the economic and industrial life of the people and to conduct research in economics and sociology. The centre of the scheme would be the organisation of

research work in the fields of knowledge named, under the guidance of those who have an intimate acquaintance with India and with research methods in these subjects. Teaching will also be undertaken by the staff of the school as well as by others which will be useful to M.A. and other post-graduate students. Mr. Percy Austey, the Principal of the Sydenham College of Commerce, has however written a note of dissent in which he protests against the recommendation of the Committee that Professors appointed to the school must possess some knowledge and experience of Indian conditions of life. There is undoubtedly some truth in the contention that such a restriction may sometimes prevent the University from securing the services of a brilliant man in England without any Indian knowledge and it may also be conceded that if the right man is available the acquirement of a knowledge of local conditions may not be very difficult. But the condition imposed by the Committee will be considered a sound one when it is remembered that economics and sociology are subjects which have a very intimate bearing on local conditions and only a theoretical knowledge of their principles will be of no avail in India, especially in the work of fostering higher research. The experience that has been gained in the country by the importation of Professors who were expected to pick up the local knowledge necessary after their arrival in the country has not been very encouraging.

We have drawn attention from time to time to the rapidly deteriorating conditions of sound discipline in colleges.

this Presidency which has till now enjoyed a high reputation for decorum and good behaviour among educational institutions in India. We are not therefore surprised that the Syndicate of the Madras University has found it necessary to issue a circular to Principals of Colleges on the subject promising hearty co-operation in the work of maintaining a high standard of discipline. We are not prepared to enter into any consideration of the unfortunate events that culminated in the unseemly strike of a large number of students at the Victoria College, Palghat, nor are we prepared to justify the punishment inflicted on some of the youths of the College. In such cases the punishment should only be corrective and sympathetic. Otherwise it is a cruelty. But we must say that the young men concerned have not been in the hands of the best advice available. They seem to have been encouraged in the belief that there was a glory in defying discipline and it was their sacred mission even when students at college, to control educational organisations—conceptions as fatal to their own progress and well-being, as they are subversive of the wisest educational ideals. We are afraid that even in several other institutions the state of things is not quite satisfactory though it has not been forced on public attention by any such serious and inexcusable defiance of authority as a strike and it is a subject

over which those interested in the proper upbringing of the younger generation ought not to sleep. In our opinion a great deal of the present day indiscretion on the part of students is mainly due to want of tactful management on the part of the authorities concerned and that is again due to the appointment of incompetent men to such responsible posts as heads of institutions. There cannot be a nobler lesson to be placed before a youth at college than the observation that to be able to obey in youth is to be able to command in age and that, as Burke said, the spirit of discipline constitutes the highest test of education.

The controversy in English educational circles about the relative part to be played by Science *versus* Humanities. science and humanities

in post-war education seems to be reaching a satisfactory solution. In a remarkable address on educational ideals delivered by the well-known English writer, A.C. Benson, some time ago in England, it was pointed out that there was really no conflict between the interests of science and humanities and the same is the text of an admirable pamphlet issued by Sir Frederick G. Kenyon of the British Museum on 'Education, Scientific and Humane,' being a report of the proceedings of the Council of Humanistic Studies. By the co-operation of societies like the Classical Association, the English Association, the Geographical Association and the Modern Languages Association, it has been found possible to discover a common basis which would also command the approval

of associations representing science. The principles enunciated at the joint conference are as follow and they seem to deserve very much wider consideration :—

(i) It is essential that any re-organisation of our educational system should make adequate provision for both humanistic and scientific studies.

(ii) Premature specialisation on any one particular group of studies, whether humanistic or scientific, to the exclusion of all others, is a serious danger, not only to education generally, but to the studies concerned.

(iii) Humanistic education implies the adequate study of language and literature, geography and history, which in each case should, at the appropriate stage of education, go beyond the pupils' own language and country.

(iv) The representatives of humanistic studies would welcome from the representatives of the mathematical and natural sciences a statement with regard to those studies similar to that contained in (iii).

(v) In all reform of education it must never be forgotten that the first object is the training of human beings in mind and character, as citizens of a free country, and that any technical preparation of boys and girls for a particular profession, or work must be consistent with this principle.

(vi) Subject to the above principles, the associations concerned would welcome a comprehensive revision of natural education from the point of view of present needs.

The Council for Humanistic Studies rightly maintain that while it is of the utmost importance to impart such technical knowledge as is essential to industrial prosperity and national safety, education should be nothing less than a preparation for the whole of life. "It should introduce the future citizens of the community, not merely to the physical structure of the world in which they live but also to the deeper interest and problems of politics, thought, and human life. It should acquaint them so far as may be, with the capacities and ideals of mankind as expressed in literature and art with its ambitions and achievements as recorded in history, and with the nature and laws of the world as interpreted by science, philosophy and religion. If we neglect physical science we shall have a very imperfect knowledge; but if we ignore or subordinate the other elements of knowledge we shall cut ourselves off from aspects of life of even greater importance." They also insist rightly upon the consideration that scientific method is not the peculiar property of physical science; all good work in all studies is based upon it; it is indispensable to law, history, classics, politics and all branches of knowledge, rightly understood. What we want is scientific method in all the branches of education which will develop the human faculty to the highest possible degree. As all humanistic studies should be scientific and all scientific studies should be humane, it is to be hoped that this apparent cleavage in educational discussion to-day will disappear.

We publish elsewhere the full text of the twenty-three interrogatories that have been issued by Dr. Sadler and the members of the Calcutta University Commission. the Calcutta University Commission to all those whose opinions are being invited for help in considering the question of University reform in Calcutta. It will be seen that the questions are very comprehensive and include all aspects of University education, special attention being shown to the needs of scientific and technical education and the part Universities should play in the material advancement of the country. The very serious problem of the safeguarding of the health and morals of the young men that flock to colleges for education, is the subject of a very searching question and suggestions are invited with regard to the organisation of residential arrangements for students, including hostels, messes and lodgings. Among the technically educational questions discussed is that of the part English teaching should play in Indian education. The idea is dawning upon the more enlightened educational section of this country that a distinction may probably be made between such theoretical instruction as in purely literary English undoubtedly necessary for those intending on an advanced study of the language and the practical instruction in the understanding and composition of the language indispensable to every student aspiring to enter the realms of all higher knowledge.

The relationship that ought to exist between Government and Universities and between Universities and individual colleges, the best location for institutions engaged in higher teaching, and the special principles that ought to regulate the education of Indian women are among the other questions that are pressed for solution. Though the questions are meant for Bengal, even those in other Presidencies will find it highly beneficial to study them in relation to the peculiar conditions of their own parts of the country.

In view of the flourish of trumpets with which the nomination of His Excellency Monsieur Martineau to deliver the annual Convocation Address had been announced, great expectations were entertained of a brilliant pronouncement from the lips of the Governor of the French Dominions in India. We are afraid they have not been realised and an innovation in the time-honored practice of having an address exhorting the graduates of the year to high conduct worthy of the University, has been introduced without adequate compensation. The address,* which is apparently meant to be an inspiration for historical research, concerned itself with a mass of details by no means stimulating, embodied in a long summary of Indian historical progress which displayed neither the true historical perspective nor profundity of spiritual interpretation. The single sentence in which Sivaji is dismissed,

* Published elsewhere in full in this issue.

with the passing observation that "he was able to give his contemporaries the illusion of having founded a lasting empire" and that he had "invented a new military tactic of a kind that decides the fate of empires" is typical of the very unsatisfactory nature of the presentation. It was obviously difficult for one who seems to believe in the essential superiority of Western political organisation to appreciate the many civil and administrative measures of the great Mahratta hero who rode so triumphantly on the crest of a great national upheaval, but historical research should have taught him better than viewing him in this uninspiring and essentially distorted light. Miscellaneous political reflections are scattered over the rest of the address, but it is beyond our province to deal with them. After a skeleton summary of the work of some scholars and some associations, weary in its length and uninforming in its nature, there follow however a few sentences on the nature of history deserving of the special attention of students of the subject. "History," remarked His Excellency, "which traces for us the frail links of events is like a nymph of early morn whose uncertain profile is only seen in the pale glimmer of dawn; she never appears in the bright sunshine of noonday nor in bold and clear outlines. Her teachings somewhat resemble consultations of the sphinx; facts most widely known are sometimes the most distorted. Therein lies the interest of history for man is ever a searcher of riddles and mysteries speak to his

heart as well as to his imagination. The duty of historians however is to get rid of mysteries and to place man as he should always be face to face with his responsibilities. This is the moral law of all societies without which none of them can lay claim to the future. The nations which have disappeared are those which gave themselves up without resistance or thought for their normal conditions of their existence in a fancied ideal. The Greeks, lovers of generous ideas and odorous sentences died suffocated by the scent of the flowers on which they loved to lie. It is true they left an immortal name but no nation should have as its foremost ambition to live in memory; the doctrine of the apostolate is good for religion only. Let us leave them the kingdom of heavens and let us keep for ourselves the kingdom of the earth, our own country, in which we are only passing guests and which demands our love all the more intensely, because the dream of life lasts such a little while."

Resolutions on educational subjects that were moved at the last meeting of the Education in the local Council. Madras Legislative Council were neither many nor important. The Hon. Mr. K. Rama Aiyengar sought to draw attention to the Palghat affair, but wisely withdrew his resolution after a statement by the Director of Public Instruction. The Hon. Mr. P. Siva Row wanted a few more agricultural schools opened in the Presidency and, the Government

having promised to consider the matter, the resolution was withdrawn. A pious resolution of the kind, which we have often seen brought on the agenda of the local Council relating to educational matters was moved by the Hon. Mr. B. Venkatapathy Raju who "recommended to the Governor-in-Council that the Government would be pleased to take necessary steps for securing the reduction of fees of the students both of schools and colleges to facilitate the wider spread of education among the masses," the *modus operandi* and the financial responsibility of the scheme to the Government, private managers and missionary bodies not being discussed, at least to the extent of persuading conviction. The vague recommendation met with the only fate that was possible and the resolution was lost. It is difficult not to sympathise with the remarks made by His Excellency Lord Pentland on the occasion. Summing up the debate he said "how was the money to be found? People had thought as if the Government had a gold mine, to give unlimited amounts for secondary education. Government meant the general taxpayer and what they proposed to do was to tax the general tax-payer for a benefit which would only go to a very small number of those who were general taxpayers. That was the first thing they would have to do because it was agreed on all hands that if they reduced the fees, they would correspondingly reduce the money available for education. It was no good thinking that the cost of education should again go down. It was going up every year. Ideals of

education and the equipment necessary were rising. Again they were only on the fringe of education. Elementary education was only beginning in a way. Female education was only just beginning. Was it possible to get money for all these from other budgets which were discussed? There were six resolutions on the agenda asking money for other purposes."

Srimati Ranganayaki Amma, of the Department of Education and Lady Senator of Mysore, is evidently

very much in advance of her Indian sisters in her ideas on the education of women. Writing to the current number of the *Mysore University Magazine* she protests against the common assumption in India that the education of woman must be so designed as to make her a merely good housewife. To give our girls, in their short school life, only such a training as is calculated to make them good wives and wise mothers is a very narrow and one-sided view of education. "A woman is a member of the civic community, as much as a man. Upon her devolves the performance of a two-fold duty, duty which is peculiar to her as wife and mother, and duty to the community at large, of which she is a member. It is this latter relation of hers to society which she must be made to realise. Domestic duties and accomplishments alone do not constitute the highest virtues.....The Hindu woman should be made to grasp clearly the ideas of nationality, national interests and the

responsibility of the individual to the race and the country. Her outlook on life which has been till now confined more or less to the family should be widened out, so as to include the progress of society as a whole in its various aspects."

The communique which the Government of Bengal has issued on the subject of the Dacca University. the Dacca University is

pathetic reading, furnishing us with one more illustration of the enormous delays in the movement of the rather heavy wheels of Indian administrative machinery. It was so early as in 1912 that the Government announced their intention of founding a University at Dacca, which should be of a teaching and residential rather than of a federal type. A committee was appointed forthwith to prepare a scheme for the University. More than five years have elapsed and the Dacca University is still a matter for the offer of explanations for delay in Government communiques. The public will probably feel thankful for at least this attempt at the throwing of some light on the mystery of the absence of progress of the scheme because proposals adumbrated by Government in India have often the knack of disappearing into abysmal depths of obscurity, which no public plummet could sound. Recalling the original scheme to our consideration we remember it was fairly sound and was calculated to further the interests of higher education by the founding of a residential University in

Dacca and also by tending to relieve the unhealthy and almost stifling congestion in the University of Calcutta. It now transpires that the scheme underwent several revisions and could not be brought within the range of practical politics only by the financial stringency caused by the war. The Department of Education is verily the Cinderella of the departments of the Imperial Government, for in no other would the delay of such a useful scheme of reform at such a moderate outlay of Government revenue be tolerated. The estimated cost of the final scheme of the University, in view of the exigencies caused by the war, was less than twelve lakhs of Rupees and inability to meet this item is the excuse for the phenomenal delay in the starting of the institution. In the meantime Dr. Sadler's University Commission has come in handily for a further excuse and the Bengal Government is waiting in a very receptive mood for the suggestions which Dr. Sadler and his learned colleagues will promulgate for their edification. We presume the report of the Commission will be ready only by the end of next year and Government will take another year for the passing of the final orders and then it must be remembered that it must meet with the approval of the Imperial Government and that of the Secretary of State before which legislation in the matter cannot even be considered and then there will be the delay of its passing through the Council after which arrangements will be taken on hand for the actual starting of the

University. We confess our imagination does not help us to penetrate the mists beyond and behold the actual inauguration of a great centre of higher education in the historic city of Dacca.

That even the material aim in education could be pushed too far is evidenced by Dr. Michael Sadler's well-reasoned protest* in the November number of *Indian Education* against the conservatism in England that obstructs the introduction of more equitable ideals in education. The opposition to the liberal measures of reform that are now in contemplation in England, does not really proceed from any fear of the nation's financial ability to bear the new burdens, but from a lurking antagonism to the social ideal which is vaguely expressed in demands for better elementary education. He pleads for the recognition of a new economic regime, which will put 'profits' not entirely out of account, but out of its central, dominating position, which conceives 'profits' in a larger, more human, and less self-regarding sense, which, in short, aims at collecting the one-sided pre-supposition of the industrial revolution. He would infuse the mediæval spirit once again, taking care to purge it of some of its evil features: "Syndicatism plus individual enterprise; guilds plus individual liberty; the spiritual power without ecclesiastical tyranny; State action plus corporate life; the recognition of nationality and at the

* Reproduced elsewhere in this number,

same time the recognition of super-national authority." Dr. Sadler is very optimistic and he has no doubt that this is the ideal to which the whole world is moving.

It was a very dignified and statesman-like utterance* that was made by His Honour Sir Edward Gait at the inauguration of the new Patna University, of which he is the Chancellor. He very wisely refrained from raking up the embers of the violent controversy about the Patna University Bill, and reconciled himself to the new features of the measure, by means of which popular opinion had to be conciliated. It was only natural that he should have appealed, in his turn, for a realisation on the part of the people, of the new responsibility with which they had been invested, and we hope it will not fall on deaf ears and the champions of the opposition to the original Bill will work for the educational advancement of their province with equal zeal. "The higher education of the people of the province," said Sir Edward Gait to his audience, "is now definitely in their own hands. It is a great trust, and I hope and believe that it will prove to have been wisely given, and that the members of the Senate will perform their duties with the sole idea of promoting to the utmost of their ability the cause of higher education in the province. I am confident that they will all co-operate in a spirit of moderation, forbearance and friendliness in the devel-

* Printed elsewhere in this issue.

opment of the Patna University. Differences of opinion are bound to arise, but when they do, I hope that those on the one side, will give those on the other, credit for a single-minded desire to do their best for the Patna University, the success of which we all most earnestly desire." One of the most serious problems in connection with the future of Indian education is to combine increased popular with educational efficiency and its proper solution needs as much self-restraint on the popular side as statesmanship on the side of Government. If excessive governmental control tends to too rigid standards of efficiency, the popular voice has an unmistakable tendency to lower academical standards, by diluting them very thin. Sir Edward Gait had also some very pertinent observation to make on the great advantages of the residential system of University life. "The ideal form of a University," he said, "is one in which all the component colleges are situated in the same place and all the students reside in their respective colleges. In a University of this kind, a large number of teachers and students are gathered at a single centre. Where there are many teachers there naturally arises a division of labour, and the teaching of each main subject, is divided among a number of lecturers, and tutors, each of whom has thus an opportunity of becoming an original worker in, or at least a complete master of, the comparatively limited field of knowledge which has been allotted to him. Thus an atmosphere of genuine learning and of co-operation in the pursuit of knowledge is diffused throughout the colleges, to the great benefit of

students and professors alike. A spirit of wholesome and friendly emulation is aroused between one college and another. The professors are thus stimulated to improve their teaching to the utmost of their ability, for the honour of their University and of their respective colleges. The students on their side, benefit, not only by the deeper learning and greater zeal of the professors, but also by the wider choice of lectures which is open to them, as the professors, in different colleges will specialise in different branches of their subject."

The inauguration of the Bose Institute of Science in Calcutta was the occasion for an eloquent and inspiring address* by Sir J. C. Bose on the *Voice of Life*. Sir J. C. Bose's discoveries of life in plant-matter, promise to revolutionise the outlook of science and philosophy, and it was no wonder, that with the vision and rapture of a prophet, he discoursed on the oneness of the voice of the whole Universe—a standpoint particularly appealing to those who have been nursed in the doctrines of Hindu philosophy. There was a vivid description of the arrangements that had been made for the prosecution of research at the Institute, the Laboratory and the Garden, the Observation Stand high amidst clumps of trees, where sheltered by the trees, the student will watch the panorama of life. "Isolated from all distractions, he will learn to attune himself with nature; the obscuring veil will be lifted and he will gradually come to see how community throughout the great ocean of life outweighs apparent dissimilarity. Out of discord, he will see great harmony." The success of the Institute is assured as the great scientist and his disciples will start work in the truest spirit of sacrifice, symbolised by

the figure inscribed on the buildings of the thunderbolt, for the making of which the ancient Hindu Rishi gave up his body, that from his bones an instrument may be forged, to smite evil and exalt righteousness.

The Indian States are rapidly taking up the question of the inauguration of new Universities, profiting by the examples furnished in British India. Mysore has already succeeded in her efforts, and other States are following suit. Travancore has just appointed a representative committee of educationists and others, to go into the question of a separate University for the State and it is said that at least Baroda and Gwalior are contemplating similar projects. His Highness the Nizam of Hyderabad has just issued definite orders for inauguration of work in connection with the proposed Usmania University in the State. All India will watch the last experiment with special interest, as Urdu is to be the medium of instruction. As the selection of Urdu as the medium of instruction involves the production of a number of suitable text-books and manuals, orders have been issued for the creation of a Translation Bureau with a staff of eight translators, on progressive salaries of Rs. 300—500. His Highness' Government remark that the new scheme "is obviously in the nature of an experiment, which has been generally considered well-worth making, and its results will naturally be watched with the greatest interest by all friends of Indian advancement. If the new University succeeds in imparting modern knowledge with greater facility and ease, than the Indian Universities, while giving its students no less a practical command over the English language, doubtless, the system here introduced will be extended to the other principal vernaculars of India."

* Reproduced elsewhere in this issue.

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ALL-INDIA MUHAMMADAN EDUCATIONAL CONFERENCE.

The following is the text of the Presidential Address by the Hon'ble Mian Muhammad Shafi, C.I.E., Bar-at-Law, delivered at the 30th Anniversary of the All-India Muhammadan Educational Conference held at Aligarh on 27th—29th December 1916:—

Gentlemen:

When my esteemed friend Sahibzada Aftab Ahmad Khan communicated to me the desire of your Central Standing Committee that I should accept the presidency of the 30th Anniversary of the All-India Muhammadan Educational Conference, I regarded the high honour offered to me as a conclusive proof of your appreciation of the part which the Punjab has played in promoting the cause of Muslim education, of which Aligarh is undoubtedly the centre of inspiration. My own connection with this great Conference dates back to December, 1893, when, at our 8th Anniversary held in the Strachey Hall, the late Mr. Syed Mahmood delivered the first of his two highly interesting lectures on Muslim Education which, subsequently revised and enlarged, assumed the form of that most valuable work 'History of English Education in India.' These were the happy days when the great founder of the Aligarh movement, whose clarion-call roused the Indian Musalmans from a death-like slumber and at whose feet some of us are proud to have learnt our first lessons in public life, was still in our midst. Few great pioneers of national movements in the history of the world have, in their own life-time, seen the fruits of their devoted labours ripen to an extent as did the late Sir Syed Ahmed Khan. The central movement had already developed into the noble form of our national College at Aligarh—one of the greatest monuments immortalizing the sacred memory of a selfless worker—and the annual meetings of this Conference had awakened the Muslim community in the outlying provinces to the paramount need of educational advancement. 'The Living Hearts of the Punjab' were the first to drink deep at the fountain erected by the noble Syed and the activities of the *Anjuman-i-Himayat-i-Islam* resulted in the commencement of a provincial educational movement

which finally culminated in the foundation of the Islamiya College at Lahore. And though our revered leader did not see his cherished dream of a Muslim University at Aligarh realized during his own life-time, his patriotic spirit has continued to inspire his successors in this great national movement until at last the noble goal at which he aimed is well in sight. Your generous appreciation to-day of whatever humble services I have had the privilege of rendering to these great educational movements during the past 25 years, is to me a source of the highest gratification. And while I fully realize the weight of responsibility which has thus been placed upon my unworthy shoulders, I have responded to the call of your Central Standing Committee relying upon your generous co-operation in maintaining the dignity of this our national assembly and bringing its deliberations to a successful conclusion.

THE WORLD WAR.

Gentlemen, all lovers of peaceful progress had earnestly hoped that the Conference would meet this year under conditions altogether different from those which mankind has had to face during the last two years. But the dark clouds of a devastating war are still hanging thick over land and sea, hurling destruction upon some of the fairest lands of three continents, destroying the manhood of some of the foremost nations of the world and crippling human resources and energies, hitherto devoted to the uplift of mankind, even in lands distant from the centre of this unparalleled conflagration. Without doubt the responsibility of this world-wide catastrophe lies with a race which, fired with the mad idea of World Dominion, has plunged the civilized world into this melting-pot of death and destruction. It is impossible for the forces of peace and mutual good-will to regain control of human affairs until German militarism is so completely crushed as never again to be able to plunge mankind into another war of this gigantic magnitude. What India has done, in this world-crisis in support of the cause of righteousness and civilization and to uphold the honour and glory of England has not only

utterly belied unfounded German calculations but is also producing, within the glorious Empire of Greater Britain, new forces and conditions which will vastly strengthen the bonds that hold its different parts together. His Majesty's Musalman subjects in this country have, in circumstances absolutely unparalleled in the history of the world and under conditions which no one of the other Indian communities can conceivably have to face, given signal proof of their traditional and abiding loyalty to the British Throne. By the willing sacrifice of their lives on the battle-fields of three continents, including those of the Near East, by furnishing to the Indian Army thousands upon thousands of recruits beyond all proportion to the ratio of their population in British India and by upholding the cause of law and order in the country itself, the Indian Musalmans have demonstrated, beyond a shadow of doubt, that they stand in no need of sermons in and outside this Conference Hall to teach them their duty to the Empire, the citizenship of which they regard as their proudest possession. On behalf of millions of my co-religionists in this country, I take this opportunity of once again placing at the feet of our august Sovereign assurances of our abiding loyalty to the British Throne and of our whole-hearted support until German militarism has received that death-blow which alone can release mankind from the awful nightmare at present arresting the enlightening forces of peace and progress.

LORD HARDINGE.

Gentlemen, when this Conference assembled a year ago at Poona, the affairs of the Indian Empire were presided over by a nobleman who, by his far-sighted statesmanship, wide outlook and broad-minded sympathy, won for himself a unique place in the hearts of His Majesty's Indian subjects. His Excellency Lord Hardinge's period of office as Viceroy of India constitutes a glorious chapter in British history. His advocacy of the claims of this country to a proper place in the community of nations owing common allegiance to our august Sovereign has raised India from the status of a mere dependency to a more exalted position which bids fair to become one of equal partnership with the other portions of the greatest Empire the world has ever known. To adopt the eloquent language used by him in one of his Bombay farewell speeches, he trusted India, he believed in India, he had hoped with India, he had feared with India, he had rejoiced with India,

and, in a word, he had identified himself with India. Verily, by his actions he demonstrated the truth of his own saying that 'the highest function of a Viceroy is to listen with sympathetic ear so as to understand India's hopes and aspirations and translate to England's King and England's people the throbbing heart that beats beneath India's placid breast and in the same way he must strive to make clearer to India the kindly feelings of earnest goodwill and sincere desire to do what is right in the sight of God that animates the less impulsive heart of England.' Realizing that the future of this country was dependent mainly upon a wide diffusion of knowledge among the heterogeneous mass of our population, he made 'Education' as one of the watch-words of his rule. During the three years of his high office, preceding the out-break of the terrible World War, his Government granted no less than Rs. 4,74,17,000, in non-recurring and Rs. 1,24,00,000, in permanent recurring grants* towards the expansion of education in this country, over and above the normal Educational Budgets of the various Provincial Governments. And when we remember that Indian Education was no part of the early Administration policy of the East India Company, that when, in 1913, British Parliament turned its attention to this paramount need of the Indian peoples, it was pleased, by section 43 of Act 53, Geo. III, Chapter 155, to ordain that 'a sum of not less than one lakh of rupees' should be appropriated to the education of the people in all the three Presidencies, and that during the entire period of 17 years, following this Act of Parliament, altogether a sum of only Rs. 51,522,000 was appropriated for that purpose, the wonderful contrast between the educational policy of the British Government during the early years of the Nineteenth and the Twentieth centuries becomes self-evident. It speaks well of the future of our country that Lord Hardinge has been succeeded in his high office by a Viceroy who, in his very first utterance on arrival in Bombay, when speaking of

	Rs.
* Recurring grant for popular Education (1912) ...	50,00,000
Recurring grant for University and Secondary (1912) ...	10,00,000
Recurring grant for various kinds of Secondary (1913) ...	55,00,000
Recurring grant for various kinds of Secondary (1914) ...	9,00,000

the place which his predecessor had won for himself in the affections of the people, proceeded to observe that continuity was, in his opinion, 'a cardinal principle of policy when one man succeeds another' and so far as possible he deemed it 'his duty and privilege to carry on Lord Hardinge's work where he has left it.' His Excellency Lord Chelmsford's distinguished scholastic career, the noble services already rendered by him to the cause of education in the metropolis of the Empire when he was a member of the London County Council and the recent announcement made by His Excellency in reply to the Agra Municipal Address that primary education, the training of teachers, the improvement of female education, and co-ordination between the various spheres of Primary, Secondary and University education were engaging the earnest attention of the Government of India, constitute a sure guarantee of the fact that the educational movement in this country will receive, during his period of office, an impetus the beneficial results of which will materially advance the cause of civilization in India and will redound to the everlasting glory of the British rule extending over 310 millions of human beings whom a wise Providence has placed under the fostering care of the British Crown.

OUR FIRST TASK.

Gentlemen, I do not, on this occasion, propose to take up your time by making a critical survey of the history of modern education from the commencement of the British Rule in India with a view to entering into a discussion of the various changes which the educational policy of Government has undergone. An exhaustive discussion of this interesting subject, extending over the whole period prior and subsequent to Lord Macaulay's famous minute, dated 2nd February 1835, and the Resolution of Lord William Bentinck's Government, dated 7th March 1835, in favour of English Education, will be found in the late Mr. Justice Mahmood's work to which I have already alluded—a work which is, beyond doubt, a most valuable compendium of educational information upon which, even to-day, non-Muslim educationalists are freely drawing in the various educational conferences which are being held in different parts of the country. The one principle, imbibed at the feet of the great master, which I have ever kept in view is to look at all problems affecting the vital interests of our people from a practical point of view.

Real statesmanship requires that we should first obtain a complete and exact grasp of the existing situation in order to be able to place our finger upon the weak spots which require our immediate attention. And in view of the unquestionable necessity of co-operation between the Government and the people in all matters concerning the advancement of education in this country, it is further essential to have a clear idea of the official educational policy in order to be able to concentrate our energies upon those portions of this great task with reference to which private efforts are particularly needed. A careful and exact diagnosis of the disease is the first indispensable condition for the preparation of an effective remedy for its ultimate cure.

THE EXISTING SITUATION.

What, then, are the existing conditions obtaining in this country in the three stages of education and what are the problems arising therefrom which the Government and ourselves have to face? On the 31st March, 1915, there were 50,579 scholars on the rolls of the various Colleges in this country of whom only 5,426 were Mahomedans. The total number of students in secondary schools on the same date was 1,097,922 of which 203,396 belonged to the Muslim community. And of 5,447,850 scholars reading in Primary schools, our co-religionists numbered 1,136,156. It may here be noted that these figures include both boys and girls and do not include scholars reading in special schools or private institutions. It will, thus, be seen that while Muslim scholars constitute less than 1/9th of the entire body of students receiving University education, their number in secondary and primary departments is approximately 1/5th of the total school-going portion of our population. Bearing in mind the fact that the Muslim community constitutes, roughly speaking, a little over 1/5th of the entire population of India, these figures obviously disclose, so far as Muslim education is concerned, a highly unsatisfactory state of things in the higher rungs of our educational ladder.

GOVERNMENT EDUCATIONAL POLICY.

Having given you statistics regarding the situation as it actually exists, I now turn to take note of the existing educational policy of Government. The celebrated Despatch of the Court of Directors of the East India Company, dated the 19th July 1854, sometime characterized as the Educational Charter

of India, contained the first declaration of policy in regard to the determination of the parts to be taken in our educational system by the State and the people respectively. After laying down the principles governing the State educational policy and the lines upon which its educational undertakings were based, the Despatch declared that 'if Government should accept the duty of placing elementary education within reach of the general population, those persons or classes who required more than this might, as a general rule, be left to exert themselves to procure it, with or without the assistance of Government*.' The Grant-in-Aid system was 'designed to be an auxiliary to the Government system for the further extension of higher education by the creation of aided schools, and it was anticipated, not only that an exclusively Government system of education would by this means be discontinued with the development of a concurrent system of grants-in-aid, but that in course of time many of the existing Government institutions, especially of the higher order, might themselves be closed or transferred to local management†'. In arriving at their conclusions the Indian Educational Commission of 1882 did not 'overlook the obligation, imposed on the Department by the Despatch of 1854, of opening schools and colleges of its own, whether as models or as the only means available, at first, of providing many localities with the facilities they required for advanced instruction' and were 'sensible of the great advantages which the people of India had derived from such departmental institutions.' Moreover, they 'recognized that private efforts had not yet been elicited on such a scale as to take the position in the general scheme of education which was contemplated in the Despatch of 1854‡'. And, finally, after stating what they conceived to be the main considerations for and against the policy of the withdrawal of the State from higher education, the Commission summed up their own conclusions in the following words:—

'Our discussions brought out clearly the fact that, while anxious to encourage any natural and unforced transfer of institutions from departmental to private management, we are not prepared as a body to adopt any form of expression that may be

construed into a demand for the immediate or general withdrawal of the State from the provision of the means of high education. We are convinced that while transfer of management under the limitations stated is eminently desirable, it is only by slow and cautious steps that it can ever be really attained. We are convinced that the wisest policy is to consider each case on its own merits, and whenever a body of native gentlemen are willing to undertake the management of a college or secondary school, to hold out to them every inducement and encouragement, provided that there is a reasonable prospect that the cause of education will not suffer from the transfer of management. The Department should cordially welcome every offer of the kind, and should accept it if it can be accepted without real loss to the community; but while encouraging all such offers, its attitude should be not that of withdrawing from a charge found to be burdensome and of transferring the burden to other shoulders, but of conferring a boon on those worthy of confidence and of inviting voluntary association to co-operate with Government in the work and responsibilities of national education. We have certainly no desire to recommend any measures that will have the effect of checking the spread of continuous improvement of higher education. On the contrary, it is only in the confidence that the withdrawal of the Department from direct management may, in many instances, be found to serve the best interests of education, by connecting local bodies more closely with these institutions, and by inducing and enabling them, in course of time, to raise and expend more money from private sources for their maintenance and to establish other institutions of the same kind, that the following recommendations are made. We, therefore, recommend, in the first place, that in order to evoke and stimulate local co-operation in the transfer to private management of Government institutions for collegiate or secondary instruction, aid at specially liberal rates be offered for a term of years, whenever necessary, to any local body willing to undertake the management of any such institution under adequate guarantees of permanence and efficiency.'

The Commission hoped that the 'result of thus encouraging rather than forcing the change desired by Government will be that in due time and without the smallest permanent injury to high education, departmental institutions will be mainly transferred to private management; that the function of the State will be largely confined to aid, supervision

and control, and that high education will become more widely extended, more varied in character and more economical than it is at present*.'

In their Resolution No. 10/809, dated 23rd October, 1884, the Government of India after summarizing the recommendations of the Commission concerning advanced education in paragraph 30, went on to say: 'The Government of India accepts the cautious and well considered proposals of the Commission on the subject of the gradual withdrawal of Government from the charge of institutions of a higher order, and especially from colleges. These recommendations are quite in accordance with the policy of Government, as explained in paragraph 10 of the Resolution appointing the Commission. It is left to the local Governments to give effect to the recommendations on this subject, gradually and as local circumstances permit. It is, as has been repeatedly declared, in no degree the wish of the Government of India to discourage high education in any way whatever. On the contrary, it believes it to be one of its most important duties to spread and foster it. What it specially, however, desires, is to secure assistance to the limited funds of the State by calling forth every available private agency in connection with every branch of public instruction. It is in connection with high education and in view of the direct pecuniary advantages which it holds out to those who follow it, that the Government thinks it can most properly insist on the fullest development of the principle of self-help.'

Gentlemen, a careful analysis of these quotations from some of the most authoritative State documents makes it abundantly clear that, apart from their merits, the main principles of the policy of the State consist in the ultimate assumption by it of the responsibility of primary education of the Indian masses and of gradual withdrawal from direct management of secondary and higher education, the co-operation of the State in the latter taking the form of 'aid, supervision and control.'

Having given you a summary of the State educational policy, I now venture to place before you my own view of what we may legitimately expect from the Government and what I conceive to be our duty in respect of the sacred cause of Indian education, upon a successful promotion of

which India's future is, in my humble judgment, mainly, if not entirely, dependent.

PRIMARY EDUCATION.

Gentlemen, from the figures which I have already given you, it is perfectly clear that the problem of the expansion of elementary education among the Indian masses is not so much a Muslim as an All-India one. You have, no doubt, observed that in spite of having entered the educational arena a long way behind their other countrymen, the Indian Muslims have, in this respect, already made up lee-way and if the rate of past progress is maintained, as I have every hope it will be, there is ample prospect of the results being in the highest degree satisfactory. From a general point of view, however, the actual state of things, in spite of the rapid progress made in recent years, is one which no Indian patriot can contemplate without feelings of great disappointment. I do not here propose to dwell on the indispensability of a wide diffusion of elementary education among our masses if India is to take her proper place in the civilized world, nor upon its urgent need as bearing on the happiness and welfare of His Majesty's Indian subjects belonging to all classes and creeds. These are axiomatic truths well-recognized by the Government and repeatedly emphasized by all public men. On the memorable occasion of His Majesty's Imperial Coronation Durbar at Delhi, held on 12th December 1911, His Excellency Lord Hardinge, in the august presence of Their Imperial Majesties, announced, among other Royal honors, that 'Humbly and durifully, submissive to His Most Gracious Majesty's will and pleasure, the Government of India have resolved, with the approval of His Imperial Majesty's Secretary of State, to acknowledge the predominant claims of educational advancement on the resources of the Indian Empire and have decided in recognition of a very commendable demand to direct themselves to make education in India as accessible and wide as possible. With this purpose they propose to devote at once 50 lakhs to the promotion of truly popular education and it is the firm intention of Government to add to the grant now announced further grants in future years on a generous scale.' It is impossible for me to describe in words the deep feeling of satisfaction with which this solemn declaration, made on such a memorable occasion and in the immediate presence of our august Sovereign, was received by all sincere lovers of progress in this country. That the solemn promise was fulfilled

* Report of the Indian Education Commission (1882), p. 355.

† Report of the Indian Education Commission (1882), p. 357.

‡ Ibid, p. 280.

* Report of the Indian Education Commission (1882), pp. 484-466.

to the very letter by Lord Hardinge's Government is clear from what I have already told you regarding the munificent recurring and non-recurring educational grants made by them during the three years following the Coronation Durbar. And had not this terrible World War broken out when it did, taxing the entire resources of the Empire to their fullest extent, I entertain no doubt whatever that the promise made in 1911, would have been continued to be fulfilled.

The Government having thus undertaken the responsibility for a wide diffusion of elementary education among the masses, what is the goal which ought to be aimed at? Speaking in the Imperial Legislative Council on 23rd February 1912, I gave expression to my views regarding this important problem in the following words:—

'The remarkable educational activity observable on all sides is one of those gratifying features of the existing situation which mark the turning of a new leaf in the history of India, and will prove a source of incalculable good to the country. The establishment of an increasing network of elementary schools throughout the length and breadth of the Indian continent and the gradual adoption, as the financial conditions of the country permit, of steps towards making elementary education free so as to bring it within easy reach of the masses.....constitute the foremost need of the time.'

Nearly 5 years have passed away since then and, in my humble judgment, time has now arrived when, on the conclusion of the War, the boon of the Free Primary Education ought to be granted to the Indian people. The Government and the various Municipal and other local bodies must co-operate in bringing the means for the acquisition of free elementary education within easy reach of our people in all urban and rural areas and, if this is done, the progress of mass education will be found to have been so vastly accelerated as to bring about a speedy realization of the aims which even the most ardent lovers of education in India have in view. And while I recognize that in an ideal State, such as contemplated by Joseph Mazzini, compulsion would be perfectly justifiable, I entirely agree with my friend the Hon. Mr. Justice Abdul Rahim in what he said, in the course of the Presidential Address delivered by him last year at Poona, that 'if a sufficient number of schools be provided at present, it will be time enough afterwards to consider how far the doctrine of compulsion may or may not have to be legalized.'

THE LANGUAGE QUESTION.

Closely associated with the problem of mass education is the language question which has been the subject of much discussion in recent years. My own views regarding this important problem were frankly and fully expressed in the Presidential Address delivered by me at the All-India Urdu Conference held at Poona in July 1911. It must be obvious to all right-thinking persons that a multiplicity of languages in our Primary Schools, whether on territorial or on communal basis, must retard that process of unification of our heterogeneous masses which is so essential for the future welfare of our people. Urdu, unquestionably the *lingua franca* of India was the result of a spontaneous compromise between the Muslim and the Hindu elements of our population centuries ago. Any movement designed to displace it from its predominant position is bound to lead to disintegration and would be fatal to the cause of intercommunal co-operation. As I said at Poona, 'instead of welding together the various classes of His Majesty's Indian subjects into one comparatively homogeneous whole, insistence on this line of policy is calculated to widen the rift and to create antagonism of sentiment and interest the baneful effects of which upon peaceful progress and on the future of India cannot now be foreseen.' In the interests of the country, as a whole, Urdu should continue to be the school language, at least, in Northern India and the Indian Musalmans will, in consequence, continue to insist upon the compromise of old being faithfully adhered to as an effective means of that unification of the multifarious elements of our population which is indispensable to the future prosperity of our common motherland.

SECONDARY EDUCATION.

Gentlemen, from what I have already said, it is obvious that the progress hitherto made by the Muslim community in Secondary Education is by no means unsatisfactory. It is, further, clear that, in view of the State policy of gradual withdrawal from higher education, to which reference has already been made, our future progress in this department will, in course of time depend mainly on our own communal efforts, helped by substantial State aid to which, at least, our Government is definitely pledged. Thanks to the sympathetic policy of His Honour Sir Michael O'Dwyer's Government, grants amounting to Rs. 2,54,413 have, in spite of the existing abnormal conditions, been made to the various

private Muslim Schools in the Punjab during the last three years and, I have no doubt, similar grants must have been made in the other Indian provinces in pursuance of the policy laid down by the Government of India. Indeed, to me it is perfectly clear that the policy of gradual withdrawal from direct management by the State itself throws upon Government the consequent duty of liberal aid towards the promotion of higher education by private efforts. In other words, the policy of gradual withdrawal from direct management does not and cannot absolve the Government of its responsibility to spend a reasonable share of the public revenues on the promotion of higher education among our people. But, as time goes on, the main responsibility will be more and more with the communities themselves and, in consequence, the need for well-organized effort on our part is self-evident. Personally, I should like to see at least one well-equipped and well-managed Muslim High School established in every district throughout India upon which the various Indian Universities could, within the area of their own respective jurisdiction, draw for the supply of Muslim scholars in the sphere of University education.

UNIVERSITY EDUCATION IN GENERAL.

Gentlemen, before dealing with our own communal problems connected with University education, I desire to say a few words regarding this important matter from a general point of view. As you are aware, we have at present, six Universities in working order in British India. In addition, a Bill for the Establishment of a University at Patna has recently been introduced in the Imperial Legislative Council and the establishment of Universities at Rangoon, Dacca, Nagpur and Poona is already in contemplation. In a continent like India, equal in extent to the whole of Europe minus Russia, and with a population of 310 millions, it is perfectly obvious that this small number of Universities cannot adequately minister to the educational needs of His Imperial Majesty's Indian subjects. In view of the fact that there are as many as 134 Universities in the United States of America, 18 in the United Kingdom, 15 in France, 21 in Italy and 22 in Germany and bearing in mind the extent of these countries as compared with that of India, the need for the establishment of many more Universities in the different parts of the British Indian Empire becomes self-evident. To those, if there be any, who still doubt the wisdom of the decision arrived at in 1835 with reference to the

then debated problem of Oriental learning *versus* English education, I would earnestly appeal for the abandonment of an attitude which is, under existing conditions, positively injurious to the best interests of the Empire and of the country, is productive of unnecessary and harmful misunderstanding and constitutes a stumbling block in the way of a full and harmonious co-operation essential to the smooth-working of our educational machinery. If, instead of wasting time in regrets over a settlement utterly beyond recall, they were to devote their attention and energy to giving right direction to the flood of natural enthusiasm for the acquisition of western arts and sciences which has swept over the length and breadth of India as a result of the liberal policy adopted in 1835, they would be rendering real service to the cause of enlightenment and civilization among the Indian peoples, representing 75 per cent. of the entire population of the British Empire.

Can any definite and uniform rule be laid down as to the system upon which our Indian Universities are to be constituted? No one realizes the advantages of a Residential System more than ourselves. That system is, so to speak, part and parcel of the educational traditions of Islam. All Muslim Universities of old—at Baghdad, Cordova and other well-known Muslim educational centres of the early centuries of the Muslim era—were founded on residential basis. But in a continent like India where varying considerations of territorial extent and communal requirements must, of necessity, result in diversity of method to be adopted for the satisfaction of our educational needs, it is impossible to lay down an invariable rule regarding the constitution of our Universities. The correctness of this proposition has been admitted by the Government in that while they are about to grant to the Province of Behar a University which will partake of the dual nature of a Residential as well as an Examining University with power of affiliating outside colleges, they propose to institute a purely Residential University at Dacca. I do not, at this juncture, propose to express in detail my views regarding the constitution of the Patna University as embodied in the Bill recently placed before the Imperial Council by the Hon. Sir Sankaran Nair, as that is a matter with which I may have to deal in the Legislative Chamber itself. It is, however, permissible for me to say that certain important deviations from the constitution of the

older Universities as remodelled by the Universities Act of 1904 regarding the composition and powers of the Senate, the extent of jurisdiction proposed to be vested in the Vice-Chancellor and the position of the Syndicate in relation to the Senate as contained in the Patna University Bill are of a retrograde character, requiring considerable amendment before the Bill can become acceptable to the progressive instincts of the educated classes.

UNIVERSITY EDUCATION AND INDIAN MUSALMANS.

Gentlemen, having given you, in brief, my views regarding University Education in general, I propose now to deal with some of the problems which concern our own community particularly in this branch of Indian education. It is unnecessary for me to dilate upon the necessity of expansion of higher education among the Indian Musalmans if they are to occupy their perfectly legitimate position in the intellectual progress of this country. As I said in the Address which I had the honour of delivering at the Lucknow Anniversary of the All-India Muslim League in 1918, political events in India are marching with a lightening like rapidity and, in circumstances such as these, it is absolutely essential for a progressive community to keep pace with the ever-changing conditions of a transitional period. Can you, as sincere well-wishers of your own community, contemplate with equanimity the existing condition of affairs in which, as I have already pointed out, Muslim scholars count less than 1/9th of the entire collegiate population of India? It is in this department of our national education that your greatest efforts are sorely needed. It must never be forgotten that, under modern conditions, the political strength of a community, the part which it is to play in the administration of the country's executive and judicial affairs and the power and influence which it is to exercise in matters appertaining to legislation, are dependent mainly on the acquisition of University education by as large a proportion of its numbers as possible. A somewhat careful study of the conditions obtaining in England and a close observation, extending over a quarter of a century, of the onward march of events in our own motherland, have convinced me that the part which we, as a community, are to play in the glorious future of India as an integral portion of Greater Britain depends upon the measure of our progress in the

realm of higher education. The task before us is indeed stupendous: we have not only to make up for past neglect but have also to keep pace with communities rapidly forging ahead in the race for intellectual advancement. Let us gird up our lions and make a well-organized effort for an accelerated speed towards the goal to be aimed at. In view of our backwardness, the Government of India fully recognize the necessity of extending to us special help and encouragement and have, by letter No. 585-995, dated the 3rd April 1913, invited the attention of all Local Governments to the necessity of providing reasonable facilities for the promotion of higher education among the Indian Musalmans. It is our duty therefore, to point out fairly and frankly to Government the particular respects in which we require the help of the State and, at the same time, to grasp exactly those of our communal needs the satisfaction of which rests upon our own private efforts.

MUSLIM REPRESENTATION ON THE SENATES OF THE INDIAN UNIVERSITIES.

Gentlemen, the guidance and control of University education being mainly in the hands of the various Indian Universities, constituted by the law of the land, it is obvious that the Muslim community must be adequately represented upon their administrative bodies. Neglect in this respect must necessarily result in grievous injury to the cause of Muslim education. That the representation of the Indian Musalmans on our University Senates is absolutely inadequate has been fully recognized by the Government of India in paragraph 3 of the letter to which I have already referred. In the Punjab where our community constitutes 54 per cent. of the entire provincial population, there are only 17 Muslim Fellows in a Senate of 85 members. Among the one hundred ordinary members of the Senate of the Calcutta University only six belong to the Muslim community and this in a part of the country where, in a view of the Muslim proportion in the population and of their educational backwardness, the need for adequate representation is obviously so great. The Allahabad University has 12 Mahomedan Fellows out of a total of 81 members of its Senate, Bombay, 7 out of 88, and Madras 4 out of 101. These figures conclusively establish the fact

that the Muslim community has, in regard to its representation on the governing bodies of our Indian Universities, a just grievance which calls for early redress. On behalf of this Conference, I respectfully appeal to the Chancellors of our Universities for an adequate representation of the Muslim interests on our Senates and earnestly hope that our appeal will not go unheeded.

SCHOLARSHIP FUNDS.

Gentlemen, Muslim backwardness in University education is, in a great measure, due to the comparative poverty of our middle classes who are, owing to their limited means and relatively higher standard of living, unable to bear the heavy cost incidental to college life and are, in consequence, not in a position to educate their children beyond the Matriculation standard. The Local Governments in the various Indian provinces have already reserved a number of scholarships for Muhammadan students and the Government of India have, in paragraph (5) of the letter to which I have already referred, invited their attention to this method of encouraging Muslim education. While we are deeply grateful to the Government of India and to the various Local Governments for their sympathetic policy, we must recognize that this is pre-eminently one of those matters in which private effort is urgently called for. The starting of Scholarship Funds in the various Indian provinces, for the purpose of providing promising Muslim students with the necessary means for acquiring University education, is the one form of our communal activity which, to my mind, is absolutely certain to produce the greatest possible results. Here again, the Punjab has already led the way and has set an excellent example which ought to be followed by our brethren in the other provinces of India. The credit for lead in this respect is undoubtedly due to the *Anjuman-i-Tarraqqi-i-Talim-i-Musلمانان*, Amritsar, which has, since its foundation in 1910, awarded 132 scholarships to Muslim students in the various departments of education and, thanks to the patriotic efforts of that Anjuman, at this moment 93 Muslim scholars are being educated in a number of colleges and schools at its expense—the average monthly outlay amounting to Rs. 1,000. The All-India Kashmiri Conference, with its head-

quarters at Lahore, has awarded 26 scholarships to the young men of that community within the comparatively brief period of its existence. And the *Anjuman-i-Raiyan-i-Hind*, Lahore, has within the last 18 months, succeeded in collecting a Scholarship Fund from which they have already been able to grant 102 scholarships to deserving students in various colleges and schools. A multiplication of such scholarship funds all over the country is calculated to bring about, within a comparatively short period, results in the highest degree beneficial to the cause of Muslim Education and to give a tremendous impetus to Muslim intellectual progress. This is an aspect of our educational problem to which, I am afraid, sufficient attention has not, in the past, been devoted by the wealthier portion of our community. If the Musalman Taluqdars of Oudh, the merchant Princes of Bombay, the Permanent Settlement Zamindars of Bengal and other well-to-do Musalmans in various Provinces were to turn their earnest attention towards this method of providing University education for deserving Musalman scholars, they would be rendering yeoman's service to the national cause. On the night of *Shab-i-brat* alone a sum of at least 5 lakhs of rupees is wasted by Indian Musalmans in fireworks every year. If a well-organized effort were to be made in every town in India to induce our co-religionists to devote the large sums which they absolutely throw away in this unprofitable manner to the promotion of a scheme of scholarship funds, the results would prove to be of lasting benefit to the cause of Muslim education.

MUSLIM UNIVERSITY.

Gentlemen, from a discussion of the problems with which I have already occupied you, I now turn to the one question which is perhaps, at this moment, uppermost in the minds of a great many of us present to-day in this magnificent hall. On the 4th February 1916, in the historic town of Benares and in the presence of a vast assemblage consisting of Ruling Chiefs, Governors of Provinces, Vice-Chancellors of Indian Universities, members of Imperial and Provincial Legislative Councils and thousands of our Hindu countrymen, His Excellency Lord Hardinge laid the foundation stone of the Hindu University. It is

of our communal responsibilities and an earnest desire to do what is absolutely essential for our intellectual and material regeneration. In a country like India and in this age of international competition in all walks of national life, the strength of a community constituting the minority of a country's population lies in its solidarity. A community already numerically weak cannot afford to have a divided camp. If the Indian Musalmans desire to occupy in this country the position to which they are legitimately entitled by reason of their past history and of the fact that theirs is not by any means a negligible minority, it is their bounden duty to close their ranks. With all the earnestness at my command, I appeal to my co-religionists throughout India to show a united front to all those forces of disintegration which threaten to break the boasted compactness and homogeneity of a people whose strength was based upon the solid rock of a brotherhood unparalleled and unknown in the past history of mankind. United you stand in this whirlwind of inter-communal competition, divided you are sure to fall perhaps never to rise again. With your serried ranks showing a compact and united front, with your material and intellectual resources organized upon solid basis, you are bound to succeed in solving satisfactorily problems of your educational backwardness which, at present, constitute such terrible handicaps to your success in the race for progress now going on in this country. There is no power on earth which can change your present deplorable condition for the better except your own united action; there is no high road to communal advancement except that which you may carve out for yourselves out of the solid rocks over which you have to travel before you can reach the Everest of your intellectual and material goal.

In conclusion, I beg to offer, on your behalf, our most grateful thanks to His Highness the Nizam of Hyderabad for the princely grant of Government promissory notes of the value of Rs. 1,71,500, bringing an annual income of Rs. 6,000, which will materially help to place this great conference on a permanent basis. The gracious patronage which His Highness has, in the past, extended to the Aligarh movement has won for him the deep gratitude of the Indian Musalmans and the munificent

grants now made to this Conference and to the proposed Muslim College in Southern India are sure guarantees of His Highness's continued interest in the intellectual progress of the Muslim community, of which he is undoubtedly the premier representative in this country. Our sincere thanks are also due to that gracious lady whose splendid generosity and sincere love for the cause of Muslim education, male and female, has enabled this great Conference to secure a permanent home worthy of its position. The deep interest which Her Highness the Begum of Bhopal has always evinced in the educational welfare of the Muslim community in all parts of India, the munificent grants which she has, from time to time, graciously made to the various educational institutions working for the intellectual regeneration of our people, have won for her a place all her own in the grateful hearts of her co-religionists throughout the country.

The Indian Muslim community can never forget the heavy debt of gratitude which they owe to their Highnesses—a debt which they cannot repay except by praying to Him who is the Infinite Source of all that is good and true of their health and happiness.

MILTON'S PARADISE LOST BOOK I

WITH NOTES AND INTRODUCTION

REVISED BY

Mr. E. H. ELLIOT, B.A.

Price—As. 14.

SRINIVASA VARADACHARI & CO.

Triplicane, Madras.

EDUCATIONAL REFORMS.

TEXT OF THE PROGRAMME.

The Education Reform Council, founded in April at a Conference called by the Teachers' Guild, England, has issued the following programme in advance of the full report, which it is hoped to complete early next year:—

The reforms proposed have as their aim to widen educational opportunity; to train all for work and leisure; to utilize more effectively national resources, human and material; to fit the growing generation for the service of home, society, and the State; to admit all to the quest for goodness, truth, and beauty; to make better citizens.*

I.—EDUCATION AUTHORITIES.

(1) The Ministry of Education should hold a higher place in the hierarchy of the offices of the State, and the salary of the Minister should be equivalent to that of other Principal Secretaries of State. (2) Progressive organization is hindered by certain statutory distinctions between higher and elementary education. Local authorities for higher education should be obliged to supply or aid the supply of higher education, and the limit of 2d. to the higher education rate in the county areas should be removed. (3) For the purpose of co-ordinating the activities of local education authorities with those of the Universities and institutions for higher education, the country should be divided into educational provinces, the areas of which should be larger than those of the existing local authorities. (See II, 11.) (4) While the recently-created medical service, central and local, has already rendered great aid to education, it is evident that what has been is but a tithe of what ought to be effected. The main result to be expected from a great extension of the school medical service is an advance in public health, in which direction a wise policy may produce a manifold financial return in national efficiency, and again in morality, health, and happiness (at least in the prevention of misery and crime) not expressible in figures. (5) There

* It is to be understood that reference is made to both sexes in all cases except where otherwise stated.

should be increased provision for the care of children under school-age, steps should be taken to secure parental responsibility. (6) Worthy private effort in education should be encouraged. With proper safeguards as to efficiency and accessibility, schools under private management should receive State-aid. The Board of Education should make adequate provision for the inspection of all schools. (7) The classes carried on under joint committees of the Universities and the Workers' Educational Association are doing work which is of national importance and deserves increased State support. If the existing grants to the three-year and one-year classes were augmented, the admirable work now done could be successfully extended so as to reach the large number of working men and women for whom present funds cannot provide.

II.—THE CONTINUITY OF EDUCATION.

(1) The principle of continuity must be carried out effectively in all branches of education; lower educational institutions being linked to higher by well-planned promotion of pupils and by attention to desirable sequence of curricula. Educational institutions should be brought into relation with professions, commerce, industry, agriculture, home-making. (2) The years from age 14 to 17 are educationally fateful. Organized education must continue for every boy and girl until at least the age of 17. (3) In elementary schools children should receive full-time education until at least the end of the educational half-year in which the fourteenth birthday occurs. Thereafter part time education should continue until the age of at least 17, in the day-time, for an average of three half-days per week or on equivalent period per annum. (4) The elementary school system should be entirely recast so as to provide—(a) primary departments, or schools, for ages from about five and a-half to eleven and a-half; (b) middle departments, or schools, for ages eleven and a-half, with optional

† The use of the term "elementary" throughout the programme does not imply approval of the term or of the statutory limits associated therewith.

The Council is not committed to the view that the teaching in these departments would be "elementary" in character.

attendance until fifteen and a half; (c) continuation departments or schools. The middle departments may be organized with either the primary or the continuation departments, or the three departments may be organized as a single institution:

(5) Varying types of continuation schools should be encouraged; but these will probably fall into two groups: Group A. for pupils whose occupation may provide a study of real cultural value, e.g., technical work in commerce, industries, agriculture, house-craft. Group B. for pupils whose occupation is temporary or fails to provide a study of real cultural value, e.g., van-boys, labour of insignificant skill. In Group A. a school for an industry, or allied group of industries, should be recognized as likely to give a good training in citizenship, and the work should have a vocational bias. Plans for development should be based on experience gained in England and elsewhere, and attention should be paid to the provision which has been made by public-spirited employers and to the work already done in women's institutes and in trade schools, especially in London. In Group B. schools, education cannot satisfactorily be centred round the present occupation. In no school of either group should the work be restricted to vocational subjects, as in both groups the aim is (a) to fit for citizenship, (b) to develop personality and encourage individual bent or capacities, (c) to meet physical needs. The continuation school must be really a school, with a corporate life of its own.

(6) Reduction in the size of classes in elementary schools is an urgent need. (7) The transfer from primary to secondary schools, from preparatory departments or schools to secondary schools, should take place usually between the ages of 11 and 12. The 25 per cent. free-place system is illogical in principle and unsatisfactory in practice. Junior scholarships and free places should be provided in such numbers as will admit to secondary schools those pupils from elementary or preparatory schools who can profitably undertake a full secondary course. Where a system of higher elementary or central schools is established, a further selection of the elementary school children at age 11 to 12 should be made for promotion to such central schools for a four-year course, assistance being

given by the education authorities. (8) The number of sufficient secondary schools of varying types should be increased. Schools provided by the local education authority should have separate governing bodies with real administrative responsibility. The Consultative Committee have advised the strengthening of the higher work of secondary school, and the Reform Council considers that schools taking the lower grant should receive grants for this purpose. Pupils at any school recognized as efficient by the Board of Education should be eligible for State scholarships for prolonging secondary education, or tenable at the Universities. Many capable students will continue to be debarred from the Universities, with consequent loss of national efficiency, if these scholarships are limited to "aided" schools. (9) In secondary schools, including endowed and public schools, pupils should remain as a rule until the end of the term in which the seventeenth birthday occurs. Financial provision should be made to enable suitable pupils to continue at school until they enter the University. (10) The Reform Council expresses complete agreement with the view advanced by the Consultative Committee that large additional funds should be provided by the State for scholarships for higher education. The amount suggested—£329,500 per annum—is not too large.

(11) The selection of students for scholarships to the Universities and institutions for higher education should be based upon an expert review of the relevant qualifications, rather than upon a central competitive examination. Such relevant qualifications are the school record, examination record, probable career, general personal fitness. The amount of assistance given should be such as to enable the scholar to live in a manner befitting a University student during the normal course required for graduation, and for the necessary post-graduate preparation for professional practice. For most professions, and for research in pure science, at least one year of post-graduate preparation is necessary. In determining the number and incidence of the awards, the main consideration should be the national need to strengthen the learned professions (including teaching), and to further industry, commerce, and agriculture. The Board of Education should allocate grants for higher

scholarship purposes to the provincial boards (see I.), the provincial boards should make the awards, their action being co-ordinated by the Board of Education or by a special national board.

(12) The attention of the managers of large commercial and manufacturing undertakings should be called to the appointments boards, which in most Universities are now giving reliable help in the selection of graduates suitable for different types of responsible work. If the guiding minds of the Universities keep in touch with leaders in the professions and industries, the claims of liberal education and of utilitarian efficiency may be harmonized. (13) Attention is drawn to the National and Imperial need for an increased number of women doctors. The higher scholarship scheme should be specially enlarged to provide full training for suitable women for the medical profession. (14) Social service is requiring a large number of trained and experienced workers. The action of those Universities and colleges who have established courses and diplomas for social study is to be welcomed, and should supply women as well as men well prepared for some of the numerous public posts created during the last few years. Work of this kind should be adequately remunerated. (15) Secretarial assistance should be provided for all but very small schools; the absence of such assistance is uneconomical, causing serious waste of the teacher's influence and personality especially on the part of the head teacher.

III.—THE SUPPLY AND TRAINING OF TEACHERS.

(1) Educational progress depends upon the possibility of securing trained men and women with the necessary spirit and ability. So far as men are concerned, the situation is bad and is certain to become worse. Before the war the requisite number of men was not obtainable, and fewer were coming forward than were needed to fill vacancies; the quality was frequently disappointing. Now war has depleted the too thin rank. A complete revision and substantial improvement of the scales of salaries should be made at an early date, in order to attract to the schools suitable men and women. Pensions should be provided on the Civil Service scale. Half measures, such as verbal persuasion and doles to

wards training of those who do not feel any bent towards the work, are futile. To recruit men and women of high purpose and needed ability, the teaching profession should draw from the Universities side by side with other professions. Teaching should be reckoned among the professions to be strengthened by the higher scholarships scheme. (2) In order to increase the efficiency of public schools and other endowed schools for boys, especially on the intellectual side, they should be staffed by men whose professional equipment includes training in the principles and practice of education; but this should not be achieved by lowering the standard of personal and academic qualifications. (3) More candidates for teaching in elementary schools should take a University degree before entering a training college, and the general standard of training should be raised. (4) On the completion of the usual training and probationary courses, modern language teachers should be assisted to live for a period of twelve months abroad, in a milieu not entirely academic, in order the better to understand the character and ideals of the country whose language they propose to teach. (5) It is desirable that teachers of commerce should have actual commercial experience as well as academic and professional training. (6) Provision should be made for special courses or for special colleges, for training specialist teachers of handicraft. If such training is being given at an institution with an extensive range of workshops (e.g., at a polytechnic) it will be advantageous to allow the persons being trained to have from time to time the free run of the workshops. (7) To supply the varying needs of different types of schools it will be necessary to utilize the services of artisan instructors in addition to those contemplated above. Such instructors should receive a special course of pedagogical training. (8) The scheme of physical training given to teachers should incorporate the hygiene of physical exercises. (9) Opportunity should be given for women students who propose being senior school teachers to take a special course of mothercraft and associated hygiene subjects. This might be taken within a post-graduate course of training, or as a post-training course by non-graduates.

IV—TRAINING OF CHARACTER.

(1) The influence of home is the earliest, and probably the most permanent, element in the formation of character; the value of good parental influence cannot be overstated. The right kind of parental authority is jeopardized by certain tendencies, e.g., foolish indulgence, showing itself in a sentimental resentment at even proper discipline; conditions of modern industry, by which the father is away from home while the children are about; modern housing conditions, making real home life impossible for many working-class families; the increase of State intervention, leading to a weakening of parental sense of responsibility. In some measure these dangers may be reduced by (a) more provision for the instruction of young parents in the moral problems connected with the upbringing of children; (b) closer co-operation between school-teachers and parents. (2) Large classes are a serious hindrance to character training.

V.—CURRICULA.

(1) It is understood that the necessary arrangements will be made for religious and moral instruction. (2) In all schools there should be great attention to English, spoken and written. (3) The curriculum for children under eleven (or twelve) in preparatory or primary departments or schools (including those preparatory to the endowed public schools) should include (a) physical training, games, dances, and other rhythmical exercises; (b) handwork, based mainly on such primitive arts as pottery, weaving, basketry, needlecraft; (c) drawing, with crayon, brush, and pencil; (d) language, including intelligent reading and learning by heart of suitable verse and prose, training of the voice in speech, writing, oral and written composition; (e) simple mathematics, i.e. the elementary study of number and space; (f) history and geography; (g) the beginnings of science, by study of environment and of plants and animals; (h) vocal music and musical appreciation. It is recognized that manners, care of person, cleanliness, tidiness, should be supervised and directly taught in all schools. (4) The curricula of the middle departments of elementary schools should be framed as the earlier part of an educational course to be completed at seventeen

through part-time departments. As a natural sequence the continuation part-time curricula will include varied developments of the work begun in the middle department, especially those parts more suited to increasing maturity of mind and physique. In Group A. schools (see II, 5 above) part of the course will have direct reference to the daily employment. (5) The minimum curriculum for a pupil from eleven to sixteen in a secondary school should include (a) English; (b) history; (c) geography; (d) a foreign language; (e) mathematics; (f) science; (g) vocal music and musical appreciation; (h) drawing; (i) manual work; (j) physical training.

VI.—EXAMINATIONS FOR JUNIOR SCHOLARSHIPS.

(1) The following affords a satisfactory scheme for the examination for the award of scholarships or free places to be held at a secondary school, the children being approximately eleven years old and coming mainly from the elementary schools. A written examination, restricted to arithmetic and English Composition, should weed out the weaker candidates and give evidence of the capacity of the more promising. This should be followed by a brief oral examination of the children who stand the written test satisfactorily. (2) The school record or head teacher's report should be taken into account in selecting scholars. Cases of marked discrepancy between the teachers' report and the results of the written examination should receive special attention at the oral examination and by review of relevant circumstances. The head teacher's report should refer to unusual aptitude in drawing, handwork, or subjects outside the ordinary curriculum, in the cases where such aptitude is truly exceptional. (3) At the oral examination the candidates should be asked first to read aloud a short passage on which questions may be put to test general knowledge. Further questions should address themselves in part to the special bent indicated in the school report.

VII.—RESEARCH IN EDUCATION.

(1) Education is intended to train developing minds, a process the efficiency of which requires a knowledge (a) of the minds to be trained, (b) of the laws of mental development, (c) of the most effective

ive methods of mental training for varying individuals or types. Such knowledge, to be reliable, can only be obtained by special research. England at present lags behind other great nations in respect of giving official support to individual research and in organizing large-scale research in education. Valuable research has been carried out by individuals but the benefit which should result is largely lost through lack of organization and insufficient publication. (2) There should be established a central institute for educational research which should work in close connexion with the Board of Education and the teaching profession. (3) The formation of local research institutes and educational libraries by the larger local authorities should be encouraged. Such local institutes could usefully begin work on a small scale. (4) In addition to the demonstration schools already required by the regulations, selected training colleges should have experimental schools. The work should not necessarily be limited to elementary education, and should be carried out under the guidance of the college staff.

VIII.—HEALTH AND MEDICAL SERVICE.

(1) The persons whose influence on the health of children is greatest are the parents, the children themselves, the medical adviser (school officer or private practitioner), the teacher, and later, the employer. Efforts should therefore be made to instruct parents, teachers, and employers in their responsibilities in relation to the health of the young who are under their control. The school medical officer should have opportunities of observing the actual hygiene of schools, beyond that which is afforded by routine health examination of school children. (2) All schools (including public and private secondary schools) should be medically inspected by a public authority. A report or certificate should be furnished to the governing body or proprietors of the school dealing with the suitability of the environment, accommodation, air space, desks, &c., cleanliness, lighting, ventilation, and sanitary provision. The intervals between school inspections should not exceed five years. (3) All children attending school should be medically inspected annually. The parents should have the option of producing the required information, at their own

expense, from their own medical attendant, in a form acceptable to the school medical officer. The school medical officer should visit at least once each term, and should conduct routine examinations annually. He should examine special cases, when requested by the head teacher, who may ask for authoritative instruction for remedial action to be sent to the parents. The head of the school should have opportunity for consultation with the school medical officer with reference to individual cases. The medical officer can often give valuable advice as to the choice of suitable careers for pupils after leaving school. The practice of parents consulting medical advisers on this point should be encouraged. (4) More air space and better ventilation should be provided in the class rooms of elementary schools. (5) The most urgent need for the public health is abundant playing space for the children. Sufficient exercise for the young means better health and efficiency in adult life. In all towns ample play centres should be provided for the use of children in and out of school hours, equipped with simple apparatus and in charge of supervisors who understand children, and can fully enter into and guide their spontaneous activities. (6) In order to be effective physical exercises should be given daily for at least twenty minutes. Proper gymnastic or games costume and shoes should be provided. Physical education should be many-sided, to serve æsthetic as well as developmental or remedial ends. Games should include stretching exercises, particularly in girls' schools: hence swimming, netball, and lacrosse should be encouraged. (7) The teachers of physical exercises should attend the medical inspection of pupils (except for parents' option as above). (8) Research is needed into the exact effect of different forms of exercises on children of different sexes, ages, and physique; particularly as to their effect on the personal health of girls and possible influence on parenthood. (9) Every town should have access to a psychological clinic for its children. (10) A weekly bath under school auspices should be secured for all children attending elementary schools. (11) Of all expenditure on public health schools dentistry is probably the most economically efficient. An annual dental inspection of all children of school-age is highly

During the first 50 years of the institute's existence about 45 students were appointed to consular posts and 90 were recipients of the travelling scholarships. They were all Belgians by birth; the following were the countries beyond the seas in which these latter resided:—Algeria, Morocco, Natal and the Cape, Japan, China, Singapore, the East Indies, Canada, United States, Mexico, Cuba, Guatemala, Venezuela, Chile, Philippine Islands, Australia, and New Zealand. In order that the Antwerp students might know what their own country could offer to the foreigners in the spring of each year visits were paid to the leading industrial centres of Belgium, and under the direction of their professors the students took careful notes of the different manufacturing processes which they were privileged to witness. In the institute laboratories they handled the raw material and by careful analysis learned what chemistry and others agents can do to change it into something useful for the service of man.

In addition to wonderfully well equipped laboratories the Institute possesses a "Commercial Museum," which perhaps in its practical utility is second to none. In itself it is an industrial educator of no mean value, containing as it does samples of almost every known textile matter and specimens of mineral, vegetable and animal products, all so systematically arranged that the commercial and industrial exhibit may be easily perceived by the serious student. These exhibits are not for show, they are used by the professors in the lecture rooms; by the frequent renewal they are kept quite up to date. The samples are contributed either by the Government, by the city authorities, or by Antwerp merchants and brokers, many of whom, educated at the Institute, take a legitimate pride in its progress as an educational medium.

Some of these same brokers or merchants give another practical proof of their interest in the establishment by giving from time to time

lectures or "causeries" on subjects of paramount importance to a student of the commercial sciences. In the spacious amphitheatre the students assemble and listen attentively to an importer of colonial produce descending on the relative merits of coffee or of tobacco, according to the countries in which it is produced; to a banker, unravelling the intricacies of a problem in modern exchange; or to a wool merchant, practically illustrating wool values and showing conclusively which are the best sources of supply and which are the best markets for the different qualities imported. The Congo as a field for trade and outlet for Belgian industrial enterprise has also at the Institute its enthusiastic exponents in the person of some successful colonist who will have gained his experience in Africa itself. The lectures or "chats," illustrated by specimens or samples of the latest imports, are given in the French language, and the foreign students are not the least eager in their attention to them. In this way the newest information about any given commodity is brought, in a popular and practical manner, under the notice of the student.

Naturally the Institute boasts a good library; it is replete with the literature of Commerce and of Industry in almost every language used in the world's trade. One special feature is the presence on the tables of trade catalogues and newspapers, sent by old students from every quarter of the globe to their "Alma Mater," if one may apply the phrase to a Commercial University. An annex to the Institute is a second museum established by the Municipality of Antwerp. This is primarily destined for the exhibition of samples and specimens of raw material and of manufactured articles supplied from abroad. In this museum the student (the public are also admitted) can study at his ease the commodities furnished by other countries and compare prices and methods of packing with those obtaining in his own country for a similar class of goods. There is a

skilled orator always in attendance, himself an expert in home and foreign trade, who is able to give detailed information as to terms, etc., upon which the said commodities can be delivered to any buyer in Belgium or elsewhere.

It has been said that from the very beginning the Institute attracted foreign students: these returning to their homes loudly proclaimed the merit of the instruction given within its walls. The result was that other nations began to recognize the necessity for the creation of a similar establishment in their own country. France established a higher School of Commerce at Paris and at Reims; Russia created one at Odessa; and Germany remodelled its "Handels-Lehranstalt" at Leipzig. Even distant Japan became alive to his necessity and appointed graduates of the Antwerp school to be temporary professors when they decided to establish a Commercial Institute at Tokyo. Some of their own young men were then sent to Belgium to study, and these, when they had graduated at Antwerp returned to their own land and became professors in their own establishment. In the United States the educational authorities were very speedily alive to the importance of the new trend of commercial education, and about 20 years ago Dr. James—a well-known educationist—visited Antwerp as a special commissioner and carefully studied the working of its Institute. The result was that either a 'commercial faculty' was at once attached to the existing Universities, or that special schools of commerce were created. Much controversy was raised throughout the States as to which of the two would prove to be the better means of reaching the desired end. Partisans of the University system objected, to use the words Professor J. Laurence Laughlin "that the new learning had only revenue as its immediate purpose instead of culture;" whereas advocates of special schools seemed to think to quote another well-known American educationist, Professor Henry Rand Hatfield—

that 'if it (the University) cannot train for business, it can at least be itself educated by the business man, who brings new points of view fresh intellectual vigour, helpful criticism, and at times stimulating error. . . . The question is still to be decided!'

But to return to Antwerp. As I have already shown, the Institute, since the beginning, has attracted to its lectures students from the most distant parts of the globe, and this cosmopolitanism has been in itself a distinct educational advantage to the home-student. He was constantly brought into personal contact with foreigners, with whom he learned to comfort himself in a friendly manner, and from whom he gleaned much useful information about their respective countries.

The foregoing is only a sketch of the Antwerp Higher Institute of Commerce as it was before the war. Enough perhaps has been said, however, to call attention to its utility in forming for a people those pioneers of industry, those captains of commerce, which every nation undoubtedly will need more in the future than in the past.—The "Times Educational Supplement."

CALCUTTA UNIVERSITY CONVOCATION.

VICEROY'S ADDRESS.

His Excellency the Viceroy delivered the following address at the Convocation of the Calcutta University:—

'I am delighted to have this opportunity of meeting you as your Chancellor. For six months and more I have been receiving files of papers relating to the Calcutta University and for all that I know of your University files it might have been a University in the moon, merely a geographical expression with no human note to relieve the aridity of the subject. I have attempted during this past week to make some acquaintance with your life.

I have visited hostels and messes and seen something of the conditions under which you spend your University days. I am not so rash as to assert that I have thereby become acquainted with your problems, but I have had an introduction to them. Personally, I believe in all cases in making acquaintance with the human factors. Where difficulties arise, in 99 cases out of a hundred, it is not the machinery which is at fault but the difficulties have arisen through an imperfect acquaintance and want of sympathy with the human element, and so during my short stay in these parts I have endeavoured to study the University not as a machine with its rules and regulations, its faculties, its matriculation, its examinations and its degrees but as a great society with its life, its hopes and fears, its ideals and aspirations. I should like then to-day in the few remarks I have to make to speak more particularly to the students not as Viceroy, not as Chancellor with a policy to propound but rather as one University man to other University men. I have been 18 years of age—though I am afraid it as a long time ago—I have dreamed dreams and I have seen visions and I have not forgotten them. I have every sympathy with those who are stirred by causes which catch the imagination and arouse enthusiasms. No one forgets the first fine careless rapture of University life, the contact with the larger world, the revelation that there are bigger things than he dreamt of in his former narrow surroundings, and when he leaves he bears for weal or woe the University stamp indelibly impressed upon him. You remember Omar Khayam:—"Myself when young did eagerly frequent doctors and saints and heard great arguments but ever more came out by that same door wherein I went." This is not and cannot be true of University life. We leave by a very different door from that by which we entered, if not we should have little use for Universities in the life of the community or that of the State.

QUESTIONS OF UNIVERSITY LIFE.

What then do I look for from you as a result of your University life. First, that you should

come out with your character formed and strengthened and that that character should be no unworthy one and next that you should come out men ready to take up the duties of citizenship and play your part in the common life, in short men with character and purpose. I look back to my University days. I believe even as undergraduates we dimly held by these two ideas, character and the responsibility of citizenship. For us it was largely a matter of tradition on the walls of our colleges. We could see the portraits of those who had played a great part in the life of the state. We took in the lesson of the past as naturally as we had imbibed our mother's milk. For you the task is a harder one. Your University is still young and though you have had distinguished alumni in the past and you have them in the present your tradition is not yet one of centuries. On your shoulders there lies the responsibility of moulding the tradition. It was not for nothing that that great educational statesman, William of Wykeham, gave as the motto of his great school at Winchester 500 years ago: "Manners maketh man"—manners not in the superficial sense of to-day but in the older sterner sense of the Latin *mores*, character. He did not leave it to his successors to evolve the note which his school should strike. He struck it once and for all time and subsequent generations have bowed before his prescience and marvelled at his insight into the heart of all education, and you with the innate imagination of your race can visualize this objective for yourselves more quickly than we of a western stock. I have no doubt then that you will accept this first objective of your University life,

'Let me turn to the second. Each generation has its particular call and for you in these days I believe the call has come to do something for the education of your country and the improvement of its material welfare. I am fully aware of the difficulties. Only the other day I asked a law student why he was taking up law with all its risks and

disappointments. He answered: "What else is there for me to take up." I am not going to discuss his answer though it gives cause to think, but this I will say that it is my sincere hope and it is the policy of my government to endeavour by all means in our power to open up other avenues of employment. So long as students think that the only avenues of employment are in the legal and clerical professions so long shall we get congestion and overcrowding in those professions, consequent discouragement, disappointment and discontent. Our policy then is first to secure that there shall be as many opportunities of livelihood as possible open to the educated classes and next to endeavour to divert the students into channels other than those of law and Government clerical employment. I hope and I believe that we shall be able to do so. Do not imagine that I promise the millennium for to-morrow or the next day. If we can lay the foundation of a policy which will increase the spheres of employment and at the same time switch off the overflowing stream of students into new channels of instruction, we shall have at least have done something to remedy what is admittedly a very serious state of things. Take for instance the great profession of teaching. At the present time it is only regarded as a form of employment which will keep the wolf from the door until briefs come in or some other permanent occupation be secured. This is not as it should be. The profession of teaching is a great and honourable profession and it should engage the whole attention of those who follow it, but this is not likely to be the case so long as teachers are paid an inadequate wage. If we are to divert students on to this road we must increase the pay and opportunities of our teachers and magnify the status of the teaching profession.

Again India is asking for industrial and commercial opportunities for her sons. The Commission which is now sitting will, I hope, give us an answer which will enable us to secure this end. It will then be our duty so to train our students that

when those opportunities are within their reach they shall be capable of grasping them. The call then to your generation is, I believe, to educate your people and to improve their material welfare. For my part I promise you that I shall do all that is in my power to enable you to answer that call. And is it not a great call? Each one of you who takes the profession of teacher as a sacred calling—and the teacher who regards his work as sacred has a great place in your history—will have the teacher's reward of knowing that he has raised his disciples out of the slough of ignorance and has made life full of meaning for them and for those of you who throw in your lot with the industrial and commercial development of your country. Apart from the material prizes which will be yours to win there will be a vision of India emerging from a life of bare subsistence to a life with a higher standard of living and of comfort.

PROBLEM OF UNIVERSITY.

I turn now to the problem of the University itself. The nearer one approaches it the more difficult, the more complicated does appear its immensity. The fact that the University is situated in the centre of a vast city, the necessity of adapting its work to the needs of the time and the demand of what I hope will be for a great commercial and industrial development, all call for serious consideration. Shortly before the war I had occasion in connection with my work on the London County Council to study the needs of London and the report of the London University Commission. It seems to me that *mutatis mutandis* the problems of Calcutta and its University run on very similar lines, and as in London it was imperative, if the University was to fill its place in the life of the community, to institute an enquiry of a very comprehensive and searching character, so too in Calcutta I believe an enquiry of the same nature is likely to be fruitful of good results. We all desire that the education given here should be of the highest and best quality and should proceed on the soundest educational lines. In London the

Government of the day realized that the problem was too vast and complicated for executive action. So they appointed a Commission of very great strength presided over by Lord Haldane and the result was the report which *omnium consensus* is of the highest educational value. Unfortunately, the recommendations in the report have had to remain in abeyance. We as the Government of India have very carefully considered the situation with regard to the Calcutta University and we have come to the conclusion that a

SMALL BUT STRONG COMMISSION.

appointed to sit next cold weather on similar lines and with terms of reference following those of the London University Commission is a necessary preliminary to a constructive policy in relation to your problems, and we have every hope that a Commission so appointed may give us a report of equal educational value. I approached Lord Haldane and asked him if he would be willing to preside over this Commission but he has replied that while nothing would have given him greater pleasure he is so deeply engaged in judicial and educational work that acceptance is impossible. I am determined, however, that so far as in me lies the composition of this Commission shall be of the strongest possible character on the educational side and that educational qualifications shall be alone considered. I am hoping to get as many as three educational experts from England to advise us and local representatives will of course have a place on the Commission of whom the same qualifications will be required. Educational problems should be considered with a single eye to educational efficiency and that has been and will be my sole thought in the establishment of this Commission and in its composition. As I told you at the outset of my address, I visited last week some of your hostels and messes and I was struck by the excellent educational material which was there. It must be our care that these young men receive the very best education on the soundest lines that we can give. In this policy I feel sure

that I shall have the cordial assent and co-operation of the University and the people of Bengal. As one long connected with education and as your Chancellor I am anxious that educational questions should be approached from the purely educational standpoint and that our sole object should be educational efficiency. I believe that a Commission instituted as I have indicated will best secure this end.

One other topic. It has been frequently urged that the time has come for the Government of Bengal to take the place of the Government of India and the Governor to take the place of the Viceroy in the constitution of the University. Since I assumed office I have been very conscious of the grave inconvenience of the distance which separates the University from its Chancellor and the Government of India. It is impossible for us to have that close and intimate knowledge of your affairs which only residence on the spot can give, but I do not think that the moment when we are setting up this Commission whose recommendations we shall have to consider is the moment for such a change. As soon as the Commission has reported and action has been taken on its report, that will be the moment when the Governor and the Government of Bengal may well take over charge. Mr. Vice-Chancellor, it has been a great pleasure to have been brought into personal touch with the University during my visit. Believe me I regard my connection with you very seriously and during my term as your Chancellor I hope that the personal relations between us may grow closer and deeper. I trust that you, your professors and your students will feel that in their present Chancellor they have one who will at all times take the liveliest personal interest in them and in their welfare. I realize to the full the high place that the University holds in the hearts of Calcutta and of the people of Bengal. As your Chancellor I entertain the hope that one result of this Commission will be to make you even more proud of your University.

* EDUCATION AT THE INDIAN NATIONAL CONGRESS.

To take up the question of education first, as it is the foremost problem in the evolution of a nation. Ever since the Crown took up the reins of government it was actuated by a broad and liberal policy of educating the people and elevating them in the scale of nations. Worried and wearied with the evasive policy of the East India Company, the Board of Control under the guidance of a far-sighted statesman, Sir Charles Wood, afterwards Lord Halifax, issued the memorable Despatch of 1854 which is now known as the great Charter of Education in India. In pursuance to this Despatch a University was established in 1857 in the then capital of the Empire.

But the mutiny having broken out almost simultaneously a pretext was easily found to propose a change of policy. Sir Frederick Halliday, the first Lieutenant-Governor of Bengal, came to the rescue and in a letter to Lord Ellenborough, who was then the President of the Board of Control, neatly disposed of the objections raised. Sir Frederick wrote:—'On the question of the connection between education and the rebellion, our wisdom, no less than our duty, is to persevere in what we have begun and not to turn our backs upon Behar or any other parts of our territory because there is difficulty or danger in the path of improvement. It is certain, however, that both the difficulty and the danger are exaggerated and look imposing only to those who keep at a distance from them and view them through the delusive mist of prejudice and misinformation. As to difficulty, the progress of Bengal, within the memory of living witnesses, is a proof of the aptitude of the people and of their plastic docility. And though it is not uncommon in these days to attribute the recent mutinies to our educational operations, and even to propose to draw back from them for fear of similar consequences in future, the error of this opinion is like that of a man who after unwisely and incautiously exposing a barrel of gunpowder to all kinds of dangerous influences and having by good luck, and in spite of bad manage-

ment, long escaped without an accident, should at last, when the fatal and inevitable explosion takes place, blame neither the gun-powder nor his own rashness and indiscretion, but rather lay the whole mischief to account of some one of the many little sparks flying about, and talk of limiting the use of fire and candle in future to prevent similar occurrences.' No more statesmanlike view of the situation, or a more crushing reply, could have been advanced, and the Government of Lord Canning made a firm stand against the hysteric cry of an alarmist crowd. I have purposely quoted this long extract, for it will be seen that the same cry has again been raised in recent years and has contributed not a little to the shaping of the present educational policy of the Government, with this difference that there is neither a Halliday nor a Canning to take a dispassionate perspective of the situation and boldly adhere to the noble policy of 1854. In 1858 two more Universities were established in Bombay and Madras, and in the following year another Despatch was issued under the authority of the Crown reaffirming the great Despatch of 1854 and laying down in clear and emphatic terms that greater impetus should be given to education in the future than had been done in the past, that more colleges and schools should be established throughout the country, that more systematic and sustained efforts should be made for the education of the masses, and that an unstinted measure of encouragement should be extended to private enterprise towards the furtherance of education by State-grants and scholarships. It has to be noticed that having regard to the aptitude of the people and to the extraordinary zeal and eagerness evinced by them for the spread of education, it was further laid down, that *Government should be reluctant to open Government institutions whenever private institutions could be expected or encouraged to do the work.* Under the inspiring influence of this noble policy a great impetus was given to the cause of education and colleges and schools rapidly increased throughout the country. This policy continued in its uninterrupted course till 1882 when under the Government of Lord Ripon another Education Commission was appointed for the further development of the educational system. Lord Ripon considering the inadequate number of Universities, conceived the

* From the Presidential Address of Mr. A. C. Mazumdar.

idea of adding two more Universities, one of which he himself established at Lahore in 1882 and the other was established by his successor at Allahabad in 1887.

But here dropped the curtain over the educational progress of India. The growing clamour of the people for increased rights and privileges and their incessant demand for participation in the administration of the country led a nervous bureaucracy to regard education in the same light as it was regarded in 1857. The people having their minds and ideas expanded by western education were aspiring to western institutions. It was indeed the dawning of 'the proudest day of England' which Macaulay in his prophetic vision had foreseen and anticipated nearly seventy years before. But unfortunately for India and England with the advent of Lord Curzon the educational policy of the Government underwent a marked transformation.

Lord Curzon came in 1899 with twelve problems in his pocket for the execution of which he obtained unfortunately for himself as well as for India a further extension of his office during which the 'brilliant Viceroy' in the name of efficiency, set back the hand of progress in almost every direction, education receiving his foremost attention. It was a veritable Pandora's Box that he carried which let loose all the forces of unrest, dislocating the existing order of things, reversing past policies and filling the minds of the people with concern and anxiety, hope alone remaining. Here were sown the seeds of that discontent which a Milton might well have invoked his muse to sing and from which both the Government and the country have been reaping so abundantly. His educational policy of 1902 culminating in the Indian Universities Act of 1904 dealt a death-blow to the further expansion of education and by its stringent rules and regulations nipped all indigenous enterprise for its further development. It was argued that the previous policy had served to extend the surface at the sacrifice of depth, and that a shearing process was necessary to check all superfluous growth. Pruning is undoubtedly good, but the use of the pruning knife on a growing plant before it has put forth abundant leaves and branches is an operation which is calculated more to destroy than to improve. These rules and regulations would have been un-

objectionable if only equal care had been taken for the proper accommodation of the ever increasing influx of boys pressing every year for admission into the existing institutions. Hundreds of young men are debarred from the colleges and thousand of boys are thrown out of schools and turned adrift aimless and unequipped into this world to fight out the battle of life. It is an undeniable fact that within the narrow scope of the present regulations some improvements have been effected and larger grants have in recent years been made for education; but it cannot be overlooked that nearly 40 per cent. of these grants are absorbed in supervision and superintendence while general education as well as the lower educational services are being practically starved. Depth may be preferred to surface, but a 'top heavy' construction is always unsafe to any structure even with the deepest foundation which human ingenuity may devise. In a country which, with the exception of Russia, is larger than the continent of Europe, there are now no more than 150 colleges of all sorts and a little over 1300 high schools and 1,27,000 primary schools for the education of the masses for a population of over 255 millions, and yielding a percentage of barely 7 literate men out of this vast population. It may be noted here that two-thirds of these colleges and three-fourths of the high schools are private institutions. This is the sum-total of educational progress made under a benevolent despotism during a period of 160 years and imagination fails to pierce into the dim and distant future when even half the population of this vast continent shall be so far advanced as to be able to read and write their names. That is how education stands in the country after more than one and half a century of British rule, and yet a modest Bill introduced by a Congressman for elementary education was thrown out with a few complimentary platitudes. The people demand a general diffusion of elementary education for the mass as preferable to no education, while Government insists upon better education for a few rather than wide-spread light for the many. No one can reasonably object to the quality of education for the few being improved, but a belief has gained ground in the public mind, not without some show of reason, that Government has begun to view the educational

problem with suspicion and distrust and to reverse the engine for a backward motion. There is, however, no room for doubt that under the plea for creating a 'serene atmosphere of education' political considerations have been largely introduced in the Department of Education. In driving out the wooden chip the iron nail has been thrust in. Teachers have turned into spies and not in few cases are Superintendents suspected of having assumed the role of C. I. D. officers. The sanctity of the temples of learning has been violated and our boys and young men are brought up in the unhealthy atmosphere of what may be called insecure jails. This the people sorely resent and here the first conflict has taken place between a sensitive subject race and an autocratic Government, each believing the other to be in the wrong and neither trusting the other either for mutual understanding or for a rational settlement of the question.

The Patna University Bill which empowers the Chancellor to deal with any matter connected with the University in any manner that may seem to him to be fit and proper, after making an enquiry to be made in any manner that he may think fit places University education in a large province entirely under the arbitrary authority of the Lieutenant-Governor of Behar, and it makes the spread of high education impossible by practically prohibiting the establishment of new colleges.

Patna University Bill.

PRINCIPAL PARANJPE'S SPEECH AT THE CONGRESS.

The Hon. Mr. Paranjpe in his speech on the Patna University Bill at the Congress said:—
Ladies and Gentlemen.—As regards the terms of the resolution it was the opinion of some members that this resolution should be rather of a more detailed character, but the terms of the bill which it is proposed to condemn in this resolution are so wholly bad that the length of the resolution would have been exceedingly bad and consequently it was thought better that the speakers to this resolution should detail the various provisions to which objection has to be taken, and I hope in the few minutes that I shall stand before you to convince you that most of the details of the bill are entirely to be condemned.

Mr. President, the large gathering that we have before us owes its existence to the introduction of English education in this country, and it is because we feel that the introduction, the wide-spread introduction, of western education is so very

vital to the progress of the country, that we look with great care upon any proposal whose effect will be to stop that progress of English education. It is because we feel that the consequence of this Bill will be to retard the spread of English education that we think that this Bill is so entirely of a retrograde character. The Universities in India were first started in the years 1858 and 1859. The University of Calcutta was first established in 1858 and those of Bombay and Madras followed in the year 1859. Since then in spite of the various shortcomings—for what human institution, what new human institution in particular, is not full of shortcomings—since then in spite of their shortcomings these Universities and the other Universities of the Punjab and Allahabad that were started later on, have done exceedingly great work. India would not have been what it is but for the existence of these Universities. These Universities, I say, have done their good work, and we want that in the new Universities that are to be started in this country all the good points of the older Universities should be preserved as far as possible. We want that further good points should be introduced in the new Universities and that they should not be emasculated and all their usefulness taken away.

Ladies and Gentlemen, the constitution of the present Universities, we know, is unsatisfactory. Another resolution will deal to a certain extent with some of the points in the constitution of the present Universities. Whatever that may be our present Universities are to some extent susceptible to popular influence. They fairly often reflect public opinion. Only in Bombay during the last fortnight we have had the Bombay University also passing a resolution in condemnation of the Bill against which I am rising to speak to-day, and I hope that other Universities in this country will follow the example of the Bombay University and record their emphatic protest against the Bill. The present Universities, then, have a constitution which is not very liberal but which we hope will be soon liberalized by an amending Act in the Imperial Council. But when we are thinking of amending the constitution of the present Universities to make them more liberal what does the present Patna University Bill contemplate? This Bill contemplates starting a University which is a University only in name. It would be a mere department of Government. The present Universities for instance have the following constituted authorities. First of all at the head of a University is the Chancellor. Under him there is the

Vice-Chancellor who is the President of the Senate in the absence of the Chancellor and who is to a certain extent an ornamental head of the University. Then there is the Senate which is the chief governing body of the University. The Senates of the three large Universities have 100 Fellows out of whom 80 are nominated by the Government, 10 are elected by Registered Graduates and 10 by the Faculties; so that the popular element in the Senates really consists of the 10 elected by the registered graduates and to a certain extent of the 10 that are elected by the faculties. But even with that and in spite of the 80 nominations of the Government our Universities, as I have said, are susceptible to popular influence. Then, after the Senate they have got an executive body which is called the Syndicate. The Syndicate is really speaking a Committee of the Senate elected wholly by the Senate except the Vice-Chancellor who is its President and the Director of Public Instruction who under Lord Curzon's scheme has become an ex-officio member of the Syndicate. Before that there was no Director of Public Instruction as ex-officio member of the Syndicate. The Syndicate was wholly elected by the Senate. The Syndicate is then an executive body, and although it is a statutory body under the new Universities Act it is practically responsible to the Senate although, let me say in passing it has been found to be the gradually extending tendency of the present Syndicates that they are trying to usurp more and more power into their hands and it is a tendency which popular members in the Senates are always trying to combat. Well, what does the New University Bill do? The New University Bill tries to solve the old difficulty by giving the whole power to the Syndicate. The Senate is to be a mere debating club in the new University. The clauses in the Bill distinctly say that the Senate is to be a merely deliberative body and that its decisions are not to be binding on the Syndicate. The Senate therefore may possibly be an ornamental body but it will be a body without a soul. Again as regards the constitution of the Syndicate if it is to be wholly elected by the Senate, it might be something. But what is the constitution of the proposed Syndicate? The Syndicate is to consist of 16 members. There is the Vice-Chancellor on it. The Director of Public Instruction of Bihar and Orissa is also to be on it. Not content with these two big and important officials on the Syndicate, remember, whose influence will be not proportionate to their mere numbers but to the important official positions

they occupy, the Chancellor, who is to be the Lieutenant-Governor of Bihar and Orissa, reserves to himself the right of nominating 4 members to the Syndicate. Over and above that five other members are to be selected from educational officers or members of the staffs of the colleges. Most of these colleges are to be Government institutions and most of these 5 members I expect, will be also Government officials or will be in the hands of the Government itself. And only there will be 3 or 4 others if at all who will represent popular opinion. What will happen is that these popular members on the Syndicate may cry themselves hoarse over any reactionary proposals, but the official members on the Syndicate will be able to carry out any proposal that they may have got in their minds and do whatever they like with the system of higher education in the province. There is the Syndicate and the Senate which, as I have told you, is a body without a soul, the Syndicate having all the power in its hands, which is practically a Government body. The Government is not even content with that. A further clause in the Bill says that the Chancellor, if he is not content with anything that the University has done, can appoint an extra body to enquire into anything that he likes—not only to enquire but to force his conclusions on the University after merely a formal consultation with the Syndicate. What is this body? It is called a University, but I do not think it is anything more than a department of Government. If we want true higher education to grow luxuriantly in the country we cannot allow a department of Government to be in charge of the whole system of higher education. In other Universities the Vice-Chancellor is the Chairman of the Syndicate. He is an honorary officer and he is appointed by the Government and he presides over the meetings of the Senate. What is he in the Patna University? He is to be a paid official of the Government under the behests of the Government and will carry out all orders of the Government and a clause in the Bill says that every power which is not reserved by the regulations to the Syndicate is to be in the hands of the Vice-Chancellor, who is to be a kind of residuary legatee, in the University. That is about the constitution of the University which, as you will find from the short description I have given you, is wholly reactionary, is entirely incapable of responding to public demand and public opinion. But that is not all. There are various other clauses in the Bill. This University will be, is pretended to be, a residential University.

I have no objection to a residential University as such but this University is, if I may say so, neither fish, fowl nor good red herring. It is neither a residential University nor an affiliating one. It is a compound of both and mixes the bad ingredients of both these kinds of Universities without having any of the advantages of either. Before I come to this joint nature of this University I would make a few remarks on residential and affiliating Universities. I myself have been a member of both. In Bombay I had been a student of an affiliating University, and in Cambridge I had been a student of a residential University, and far be it from me to say that residential Universities like Cambridge or Oxford are entirely useless. They are exceedingly important and if we could introduce Oxford or Cambridge as they are and not simply as a body without soul, we should be exceedingly glad and higher education in India would receive an impetus which it could not receive in any other way. Let me tell you that residential Universities serve one distinct purpose. Anybody who has been to Oxford and Cambridge will tell you that they are very expensive Universities. They are not Universities for the common people. In England over and above Oxford and Cambridge there are various other provincial Universities. Moreover, there are important Scotch Universities which are poor men's Universities by means of which the poor man gets higher education. Oxford and Cambridge subserve the needs of the rich class of England who can afford to spend £300 or £400 a year. People come to Oxford and Cambridge to get education no doubt, but only to get a certain standard of gentility and position which Oxford and Cambridge only can give. If we are to start in the province only one University pretended to be an imitation of Oxford and Cambridge having none of their advantages, what is the good of it? What is the good of a University like that for the purposes of India where we have not got a large class of rich people who can spend more money on the education of their children. It is not possible to have a residential University alone in any country. I have no objection to residential Universities at all, but they are to be in addition to affiliating Universities and not substitutes for affiliating Universities. This Patna University, as I have said, is to be, is pretended to be, a residential University. The only residentialness that I see in the constitution is that no new college is to be started in Patna which is not within a radius of one mile from the Senate House of the Patna University. A

very important provision of this Bill is that no new colleges are to be started except in Patna as I have said, and in four other places of the province. At present the province of Bihar and Orissa is badly provided with colleges. There are two or three colleges in Patna and there are 5 colleges in 5 other centres. Now, it is proposed under this Bill that of these colleges one college is to be killed outright. The college at Monghyr is to be entirely stopped because, it is said, it is not a large college nor an efficient college. The colleges are to be allowed to remain in 4 other centres in a state so to say of suspended animation, because, although these colleges are allowed to remain in other centres they are strictly forbidden to teach any but the most elementary subjects and not honours subjects and not at all for the B. Sc. and I. Sc. The college at Cuttack only is to be affiliated for honours in B. A. and for the pass degree in B. Sc. Just see the particular emphasis on taking away all affiliation from these outside colleges for anything that will raise their importance. It is proposed in fact to kill all mofussil colleges to bring everything to Patna. There was in the University of Cambridge a college which was started on this principle. Cardinal Woolsey thought of starting a college in Cambridge. What did he do? He did not spend any money of his own. He took the endowment of other colleges and stopped those colleges and he built the new one. That might be possible in Cambridge in those days of Henry VIII. But that won't do in these days. Now, you can take it from me as a teacher that a teacher always aspires to teach to the highest extent that is possible. If you tell a teacher: 'You have to teach only elementary subjects and not higher mathematics; etc.' he will lose all interest; you must allow the institutions proper liberty to expand, give them proper scope for improvement. If you once for all tell them that they are to proceed to a certain extent and no more those institutions are not likely to be very efficient. By all means insist on proper conditions. If the colleges aspire to teach higher subjects in science ask them to provide for the proper teaching of those subjects, ask them to provide proper science laboratories, proper museums, proper workshops, etc. If they ask for permission to teach subjects such as philosophy and Sanskrit, ask them to have proper and adequate staff. All these conditions nobody objects to. If you say that they are to be merely pass colleges and can never hope to rise further then I say those institutions are practically half-

dead. Not only from the point of view of the institutions themselves I look at it more from the point of view of students. What if students are not able to afford to go to Patna for higher education? Are you going to condemn all the youths of the province to a mere pass degree, and that only if they are born in those few centres in which the colleges are? You must always see that the Indian student is always a poor student and the gates of wealth are not open to him. We must in any educational system that we are starting, consider always this fact that our students are poor and we must take into proper account the condition of these poor students and see how facilities are to be provided for their education. Most of the students are poor. Everybody in Bihar and Orissa cannot afford to go to Patna and even those few centres. The Bill provides that no new colleges are to be started in any other centre. Let us see how new private colleges are generally started. New colleges are started from various motives. Generally some philanthropic man or some public spirited man wants to start a college in his own place or wants to get fame in his own circle. That is a very natural ambition and we need not spurn or condemn that ambition because everybody is not wholly philanthropic. New colleges in all parts of the country are started from this double motives. There is the philanthropic motive, and there is the personal motive of glory and fame. Where will you think that a man would start a college? Not in any place where the men with whom he is associated will never see. Most of the Universities are started in this manner. Only recently in Bristol for instance a University was started from the donation of one single individual. All the provincial Universities are started in this manner. The Manchester University rose from one college, Owen College, which is the gift of one man. The Birmingham University also rose in the same way. Many of the private colleges in this country also have risen like that, and it is only by stimulating popular liberality to a certain extent by stimulating this legitimate ambition for fame and glory that we shall be able to get many public institutions. This method of confining all higher institutions to only four centres will kill the fountains of this philanthropy at its very source.

Not only that, there is a further grievance. We have been hearing in this country, from all parts of the country, the cry of congestion in colleges. Everywhere students are being refused admission into colleges, because there is no room for them,

because there are various regulations about admissions requiring that such and such provisions should be made, and the colleges are not ready and consequently hundreds of students are going away being turned out from the gates of the colleges simply because there is no room for them. And it is a very pitiful sight to see that young men from whom good things are expected are denied opportunities of realizing the best that is in them. When the colleges are to be confined to a small number for all time to come what is to be done with the growing number of young students that aspire to get higher education? After all, we must see that the future of this country is dependent upon the wider spread of education. If we are going to tell these young men that we are not going to make provision for higher education for them they are sure to be most discontented. Even politically the result of such a state of things is bound to be very bad, and I therefore say that the constitution of this University, from the point of view of these external and internal colleges, is possibly the worst feature of this Bill. By all means as I have said, require any conditions to be fulfilled before affiliating a college but do not once for all slam the doors in the face of students.

Ladies and Gentlemen, the grievance is not a provincial grievance merely, although Bihar is first in front of this danger. The future of Bihar of course is bound up with a proper University, is bound up with the existence of proper facilities for higher education. The whole future depends on whether they are going to get a University responsive to public ideas and capable of continuous development. But over and above that there is the wider point of view, the point of view of the whole of India. Remember that the 5 Universities and the sixth that is not being started will not do for the whole country for all time. Even a small country like England has got 15 or 16 Universities, and Germany has got over 30 and little Italy has got 20 Universities. India is not going to be satisfied with 5 or 6 Universities for all time to come. For the proper provision of University education several Universities—I was going to say hundreds of Universities—are required. Already we are hearing of schemes for new Universities for Burma, for Dacca, for the Central Provinces, and our late Governor told us that we were likely to have Universities at Poona, Ahmedabad and Karachi. The Madras people are talking of a University for the Andhras, a new University at Trichinopoly, etc. There are many

other schemes also. Remember that all these Universities that are in contemplation are bound to become matters of practical politics sooner or later and therefore if we allow a reactionary bill of this type to be once placed on the statute-book the new Universities will not contain any of the few liberal provisions that are at present existing in our older Universities; all the new Universities will be modelled upon the new Patna University. It is therefore a question not only for Bihar and Orissa. It is a very vital question for the whole of India and it is very important that this Congress should declare its emphatic protest. Bihar has already done its duty. Bihar has recorded its emphatic protest in a special session of the Bihar Provincial Conference. The other provinces ought to follow suit and ought to encourage Bihar in her protest and do all they can to tell the Government that it is not a bill of this nature that we want. The Bihar people wanted a University but it is as if a man wanting bread was offered a stone and asked to satisfy himself with it. It is not in this way that we want higher education to be encouraged. The Bombay Senate, as I have said, have already recorded their protest. The Bill has been sent to other Universities and I hope they will do the same. But a large gathering of the whole country assembled like this, ought, I say, to record its emphatic protest. My resolution says that the Bill should be so amended as to make it a thoroughly liberal and progressive measure. I myself would rather have said that the Bill should be withdrawn and a new measure, a more liberal measure, introduced into the Council. Remember that our Education Member is an Indian with thoroughly Indian sympathies, and if we only show our decisive disapproval of the provisions of this Bill I am in very great hope that our protest will be successful and Bihar will be given a University more worthy of its name and more calculated to further its educational progress.

MR. ARUNDALE ON EDUCATION.

Mr. G. S. Arundale in moving the resolution on Education said :—

Mr. President, and brother delegates,—I have in the first place to apologize for the length of this resolution, but the education resolution is as important as the Home Rule resolution we passed on Friday; and therefore perhaps the apology is not so essential as it might seem. The resolution runs as follows :—

(a) That this Congress records its deliberate

conviction that to foster the development of high education in India, it is necessary that (1) administrative and educational service should be filled mainly by qualified Indians, the existing.....between the Indian and Provincial Services being done away with, and that (2) a substantial majority of the members of the Senates of the Universities, now existing or to be established, should be elected by the graduates of the Universities and by the professors and teachers of institutions affiliated thereto and that such Senates should have full control over their own executive and educational policy.

(b) That this Congress is strongly of opinion that Government should assign larger sums of money to secondary and higher education than is done at present and that the rules relating to the maximum number of admissions into a class, fees and grants-in-aid should be modified and that in the matter of grants-in-aid the present differences between European and Indian students should be abolished and facilities afforded to all deserving pupils irrespective of race, caste or creed, for receiving the benefits of higher education.

(c) That in view of the paramount importance of educating the masses and the experience of other countries which shows that the diffusion of elementary education is essential to widespread industrial education and general progress, this Congress urges upon the Government of India the necessity of taking early steps to make elementary education free and compulsory.

(d) That in view of the experience of other countries this Congress strongly urges upon Government the urgent necessity of starting an adequate number of industrial, technical and commercial, agricultural schools and similar institutions of a higher type to provide suitable education for industrial and commercial careers, which will have the additional advantage of relieving the pressure on accommodation in general schools and colleges.

(e) That this Congress is further of opinion that if necessary, and until national control is effectively secured over the educational system, voluntary organisations, independent of Government control, should be started and developed for the purpose of founding and expanding schools and colleges and for imparting a general, technical and

commercial education suited to the needs of the country.

(f) That in the opinion of this Congress compulsory religious instruction in any school or college aided out of public funds, to pupils the consent of whose parents has not been previously obtained, is incompatible with the policy of religious neutrality to which Government has pledged itself, and urges the early insertion of a conscience clause in the educational code to prevent interference on the part of school or college authorities with the religious beliefs of their pupils. That, brother delegates, is the general resolution. I venture to assert that this resolution expresses the same dissatisfaction with regard to education, that we have already expressed with regard to the government of this country. I think that this resolution is in the same way a step towards the final and complete control of India over the education of her children. Behind every one of the clauses of this resolution is one fundamental fact. On the question of Home Rule you will see written up there 'Good Government is no substitute for self-government.' I say with regard to education that good education is no substitute for national education. And this undoubtedly means, so far as I think, that the training of the youth of India must be in the hands of the teachers of their own race. That is of essential importance in the development of reconstruction that is now taking place. Everywhere else but in India this is the cardinal principle. Why should it not be a cardinal principle in India too? And it is in furtherance of that that we are asking you to pass this most important resolution. India refuses any longer to be an educational dependency of Great Britain. India refuses to be an educational dependency of a country which, as Lord Haldane has told us, lags behind many other countries in the matter of educational progress. We want to be in the forefront as once in ancient days we were and as we shall be in the forefront of the world's education in the near future. The spirit of our national traditions and the spirit of our national aspirations, must everywhere permeate our schools and colleges, and we shall not be satisfied until such spirit is broadcast everywhere throughout the land.

What are the defects of the present system? In

the first place, as Mrs. Besant told you yesterday, we have been refused free and compulsory education. Mr. Gokhale made every effort which was possible but his efforts were in vain. We have therefore to say at the outset that if the absence of education stands in our way it is not our fault. It is the fault of the rulers of the country. That is the primary defect in the educational system as we have it at present. Then we have that obstructive measure, Lord Curzon's Universities Act of 1904. That and the new Patna University Bill which we have already spoken about to-day show that reaction is rather the order of the day than reform and therefore it is all the more necessary that we should lift our voice for truly national education to be spread throughout the country. Then let us take up the other defects. Look at the constitution of our Indian educational service. I would rather call it the European educational service. There are so few Indians in it. There ought to be a majority of Indians in that service, not a majority of Europeans at the present time. Then again we all know how young Europeans appointed by an ignorant Secretary of State are sent out to this country to take precedence over those who are far abler and far more experienced than any European at any time could possibly be. We want to abolish it. We don't want men like Prof. Jadunath Sircar and Dr. J. C. Bose to take a second place to young Europeans without the slightest Indian educational experience. Then, take the European professor at the present time. In olden days a European professor or a European teacher was far better than he is to-day because it was not so easy to get to England as it is at the present time. Now-a-days he can take furlough every year and go to England. In those days he could not go often; he had to be here, he had to identify himself with the interests of the people here and the result was that he was a friend of the people far more than the present professors are the friends of the Indian people to-day. What we ask of all our teachers is that they should love India above all else. Few Europeans can do that: therefore there must be few Europeans in the Indian Educational Service. I would tell you frankly—the President perhaps would not object—that in proposing this resolution I rather wanted that all the higher ad-

ministrative posts in the Indian Educational Service should be exclusively occupied by Indians, but I was told and I was glad to be told, that there was no harm in having a few Europeans—And that will give me a chance of coming in; and I think I may go so far as to say that I love India above all else. Perhaps I am able to say that I fulfil what is the necessary qualification. So much for the European professor, we dismiss him with the general sentiment that he is not in touch with Indian aspirations and therefore is not fit to teach India's children.

Then look at the times of study. The times of study are arranged now to suit European convenience. After a heavy meal at 9 o'clock in the morning a student has to go to his school because that suits European convenience, but it does not suit Indian convenience, and it was not so in early days. We want to restore the ancient system. We don't want the system under European domination when the blood has to struggle between the stomach and the head as at the present time. Then, we all of us know that the curriculum is entirely overloaded and the minds of students are being shamefully ill-used. The result is that the mind has become the master of students instead of being his servant. Everywhere the mind takes the first place and everything else besides mind take the second place or no place whatever. For example, is patriotism taught in the schools as it ought to be? Patriotism among our young men is far too much synonymous with sedition. There are no seditionists among our young men at the present time. They are all

patriots and as patriots they should be treated and as patriots they would be treated if only Indians had the control of Indian education. Where for example is the training of India's youth in the defence of the motherland. We have a resolution on that. What we require is that physical development and proper military training should be given precedence over everything else, even over intellectual instruction for that comes second as it did in the Code of Manu to whom our European masters might very well turn for instruction.

Finally,—my time is very short—let me try to suggest to you that you must look with impatience upon the way in which our young men are repressed at the present time. Every effort at self-expression is repressed in the most abominable manner. In Great Britain the young men at the present time are urged to leave their colleges, are urged to go to the battle front and to fight for the defence of their motherland. It is unnecessary here that the Indian youth should be; they are still in the unfortunate position of being able to go on with their studies. But they ought to be allowed to take an intelligent, suitable, active share in the growth of their motherland to have freedom which is her birthright. I would paraphrase simply the statement of Mr. Tilak which he made when he was proposing a vote of thanks to me when I lectured on Home Rule recently. He said:—We do not want arguments, Home Rule is our birthright and we want it. That is all. I say: National education is our birthright and we want it.

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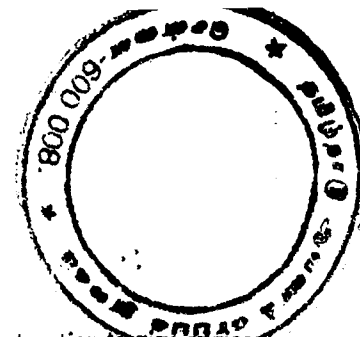
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UNITED PROVINCES COUNCIL.

CONSTITUTION OF BOARD OF EDUCATION



Mr. Chintamani's Resolution.

At a meeting of the U. P. Legislative Council held on Monday the 5th inst., the Hon. Mr. C. Y. Chintamani moved the following resolution:—

'That this Council recommends to His Honour the Lieutenant-Governor to reconstitute the Board of Education so as to include in it some members elected by the Managers and Headmasters of recognized High Schools and to empower it to advise the Director of Public Instruction and the local Government on all important matters relating to Elementary and Secondary Schools.'

MR. CHINTAMANI

said that the Board of Education was constituted in these provinces in 1914 following the resolution of the local Government on the report of the Piggott Primary Education Committee. Its scope was restricted to advising the Director of Public Instruction on matters relating to primary education, and only on those matters which were placed before it by the Director and not upon any matter which it might think to be important enough or upon which it might have opinion to give. Secondly, it consisted of so many members as the Lieutenant-Governor might nominate. So, its scope was restricted to only primary education, and it was a body the members of which were purely nominated by the Lieutenant-Governor. From the paper that had been supplied to them in reply to a question put at the last meeting of the Council it appeared that the Board had met between September or October 1914, when it was constituted, and the present time only once or at most twice, and it would seem to have considered during that interval only one subject and that was rural primary education in connection with the pamphlet of Mr. Freemantle on the subject. Even as regards primary education he believed that there had been enough questions during that interval of sufficient importance to justify the public in expecting that the Board would have been summoned by

the Director of Public Instruction to give advice to him and to the Government on those matters. The information placed before them enabled them to form the opinion that the Board had not been so summoned and that about the only subject placed before it was the subject of rural primary education. The speaker had noticed that in another province the United Provinces were congratulated upon the liberality of the local Government in constituting the Board of Education, which they said was an indication that that Government made up its mind about the importance of consulting public opinion in every educational matter and acting in concert with that opinion. It appeared to him however, that the congratulations that were offered to them were at least premature, because the Board of Education seemed to be more a body on paper than a real live body. In the second place, the Board did not consist of any member who had been specially sent there by any authorities connected with schools. The object of his resolution was twofold. It sought in the first place to enlarge the scope of the Board of Education so that all matters relating to primary and secondary education, and not merely primary education, might come within its purview. In the second place, it sought to include in the Board some members who would be there as the accredited representatives of recognized high schools in this province. In respect of the functions of the Board not merely did he seek to enlarge its scope but also to empower the Board to give advice on any matter on which it might think fit to give advice, instead of merely on those matters which were placed before it by the Director of Public Instruction. He did not seek to make its opinions binding upon the department or the Government when they did not see their way to accept them. All that he sought was that the Government and the Department must have before it the authoritative opinion of a body composed of competent persons partly nominated by the Government and partly elected by the Managers and

Headmasters of recognized High Schools. The question might be put to him whether there was any need to enlarge the Board in the manner suggested. His reply to that question would best take the form of a mention of a few of the more important matters which were treated in the Education Code—matters the decision of which rested at present solely with the Government and the department, without the high schools and elementary schools which were primarily affected by their decisions having any say in those matters before the decisions were actually arrived at. Public English schools for boys, public vernacular schools for boys, Government normal schools, special schools, scholarships, grants-in-aid rules, were all dealt with by the department. The department dealt with courses of study, religious instruction, text-books, inter-school rules, admission, withdrawal, punishment and rustication of students, fees, hostels and recognition of schools. He submitted that those were matters of sufficient consequence to the public to be dealt with by the Government and the department after consultation with, and with the advice of a body such as the Board of Education instead of being considered and determined by themselves and the public being allowed an opportunity merely for more or less *post facto* criticism. In these provinces they had bodies similar to the Board of Education in respect of other departments of administration, which were constituted differently, whose functions were larger and which proved themselves more useful than the Board of Education. He might refer to the Sanitary Board for instance. The Sanitary Board consisted not only of officials of Government but of a few non-officials nominated by the head of the Government. It met at regular intervals and summaries of its proceedings were sent to the press for general information, and the public throughout the province had an opportunity of knowing almost month by month what were the matters which were engaging the attention of the Sanitary Board and what decisions had been taken by it on these matters. Then there was the Board of Industries. It did not meet at regular intervals, as did the Sanitary Board, but it did meet much more frequently than the Board of Education, many matters went before it and he hoped that the Director of Industries and the Direc-

tor of Agriculture would be able to testify that the meetings of the Board of Industries did not merely represent so much waste of official or public time. He thought there was no department of Government which was so very much in touch with public opinion or which was so transcendental in wisdom that it should be above the need of knowing what the representatives of the public had got to say about the matters they dealt with. Departmentalism might be a very good instrument of efficient administration if the phrase 'efficient administration' was construed in a very narrow sense. But he submitted that the most efficient departmentalism was not an adequate substitute for administration in consultation with public opinion and in sympathy with the wishes and needs and requirements of that public opinion. While the complaint was general in respect of the administration in India at present that there was too much of departmentalism and too little of consultation with the public and of respect for public opinion, he thought that during the last ten or twelve years the complaint had not been more pointed or more frequent in relation to any branch of Government activity than in respect of its educational policy and its educational administration. He had yet to meet a Manager or Headmaster of a private high school, either aided by the Government or merely enjoying Government recognition, who had not got some grievance or other against the manner in which the departmental rules were introduced and enforced without reference to the special difficulties of private high schools. The complaints of parents and students were even louder and more pronounced. The debate which he raised last month with regard to elementary education would have served to show that there was a certain amount of dissatisfaction with the present position which it would behove any Government which wanted to respect public opinion to try to remove. The complaints were thus in respect of both secondary and elementary schools and with regard to many of the matters which were dealt within the Education Code, and there was the general feeling that there might be a little less of departmentalism and a little more of association of popular representatives with the management of educational affairs and with the determination of the educational policy

He thought that the constitution of the Board of Education in the manner his resolution suggested would, without embarrassing the Government or the Department of Public Instruction in any manner, result in greater harmony between the thinking public and the department and the Government and a much more efficient and suitable educational policy than at present.

The Hon. the Maharaja of Balrampur seconded the resolution.

THE HON. MR. DE LA FOSSE

said that he thought that the Hon. Mr. Chintamani moved his resolution in some misapprehension of the functions which the Board of Education was desired by the Government to exercise. The Board of Education had been modelled upon what was known as the Consultative Committee of the Board of Education, at Whitehall in London. The Consultative Committee of the Board of Education consisted of a number of persons eminent in education who had been invited by the Board to advise it upon questions of unusual difficulty or complexity should the Board feel that such outside advice was needed. The Consultative Committee was of course not an elected body and it had no initiative. It merely considered questions which had been referred to it by the Board of Education. The functions of the local Board of Education were intended to be on similar lines. His Honour had constituted the Board of Education with a view to assisting the department to dispose of questions of peculiar difficulty with the help and advice of persons who for one reason or another might be peculiarly helpful to the department in dealing with some particular branch of the subject of education. The functions of the Board were thus practically, similar to the functions of the Consultative Committee. Mr. Chintamani complained that the Board did not meet constantly. But, as the function of the Board was merely to advise when for one reason or another the Government or the Director of Public Instruction desired its advice, there was no necessity for frequent meetings. He might mention that the Consultative Committee of the Board of Education did not meet at all last year and from the report of the Board of Education it appeared that it only held one meeting in the previous year.

Mr. Chintamani wished to alter also the constitution of the Board. Instead of making it a Board of gentlemen whom the Government called together to advise them, he wished to turn it into a representative body and one reason for this which he gave was that the present Board did not represent the interests of persons interested in secondary education. He told them that it did not contain any persons connected with schools.

Mr. Chintamani, interposing, said that he had not said so. What he said was that the Board did not contain persons sent there by the Headmasters and Managers of High Schools.

Mr. de la Fosse continuing, said that the Board according to its constitution, contained three ex-officio members—the Director of Public Instruction, the Chief Inspectress of Girls' Schools and the Special Mahomedan Inspector of Schools. It also contained three officers of the Education Department, two Chairmen of District Boards, and eight others, whom the Government nominated from time to time. But the present members represented the following subjects speaking generally. One member represented co-operative credit which was concerned with education and he could give them useful suggestions. Another member was the late Vice-Chancellor of the Allahabad University and he need not specify his claims to serve upon such a Board. Then there were members who represented colleges and schools. There were three managers of schools represented on the Board. In addition to them there were members who were interested in agricultural education. So that the Board could not be said to be non-representative in character so far as non-official members were concerned. From Mr. Chintamani's speech he gathered that he wished the Board to exercise a sort of controlling influence over the Department of Education. He had in his speech made some severe strictures upon the working of his department which might or might not be justified, but should Government desire to take into consideration the views of the public in regard to educational matters it was open to Government to call a committee together to discuss the subject. This, as Mr. Chintamani knew, was the usual practice. Mr. Chintamani also wished that before the department took any action the Board of Education should have

an opportunity of considering whether that action was necessary. He (Mr. Chintamani) objected apparently to many of the rules of the Education Code and he would like the rules to be reconsidered by the Committee. In fact, he wished to substitute a popular form of government for the departmental form of government. Such a system of government existed in no country in the world. It would be quite impossible to administer public education under such a system owing to the immense delay and confusion which would occur in the issue of orders and instructions. A standing committee was on altogether unsuitable body for representation on a popular basis. A standing committee might be said to be a committee which contained members who were in continual session and the members who were on that committee could not possibly continuously represent public opinion. They represented or should represent the views of expert educationists or of persons who for one reason or another had qualifications to speak with authority on some particular branch of education. Since even so highly organized a body as the Board of Education at Whitehall was content with a Consultative Committee with limited functions it did not seem to him that the time had arrived in the United Provinces for giving to the Board of Education, a body similarly constituted, for wider functions. The Board of Education had not been in existence for long, it had yet to justify itself and the time did not seem to him to have arrived at any rate for the present, at which the Board should undertake such wide functions as Mr. Chintamani asked the Council to give to it.

THE HON. MR. O'DONNELL

in opposing the resolution on behalf of Government said that there was little that he need add to the remarks made by the Hon. Mr. de la Fosse. He agreed that the schools should be represented on the Board of Education; but Mr. de la Fosse made it quite clear that there were some gentlemen on the Board who were qualified to represent them. He was however unable to agree that the system of election would be a suitable one in selecting members of the Board. As the Hon. Mr. de la Fosse had pointed out, the Board of Education was an expert body composed of gentlemen who possessed certain

qualifications for advising the Government on educational matters. There was no guarantee, there was no likelihood even, that a system of election would give them gentlemen of those qualifications. In the case of the Consultative Committee of the Board of Education in England the system of election had not been adopted. When the system of election had not been found suitable in the case of a body like the Consultative Committee it could hardly be considered appropriate in the case of the Board of Education in these provinces. The Hon. mover had spoken about the accredited representatives of public opinion. As to that he said that non-official expert opinion was well represented on the Board of Education. Non-official opinion in general was represented in that Council. An expert body was not a place where public opinion was expected to find representation. As to the functions of the Board, the Hon. mover's proposals, if accepted, would result in converting the Board into a sort of committee, exercising continuous control. It was not with that intention that the Board of Education had been constituted. The Board was intended to be an advisory body. There was no analogy between the Board of Education and the Board of Industries or the Sanitary Board.

THE HON. MR. CHINTAMANI

in reply to the debate said that in the two replies which had been given on behalf of the Government it had not been stated that the scope of the Board of Education should not be enlarged so as to embrace the field of secondary education. He did not know whether he was to understand the omission to mean that that part of the resolution was not felt to be of sufficient importance to require a reply or that they had no objection to so enlarge the scope of the Board. Coming to the other observations of the two Hon. members he was sorry to say that while he had listened with much interest to both the speeches they had not produced upon his mind any feeling that he had put forward an impracticable proposition. The Director of Public Instruction began by correcting what he thought was a misapprehension on his part of the functions of the Board and then pointed out that these functions were analogous to those of the Consultative Committee of the Board of Education in England. He was aware

that the functions of the present Board of Education here were merely to advise the department when matters were placed before it. In fact, that was what he explicitly said in his opening speech and that was also the matter that he complained of. The Director of Public Instruction said that the Board had yet to justify itself. He was rather surprised to hear that observation, and it reminded him, if he might be pardoned for mentioning it, of a saying of John Bright's that to hold the Indian Civil Service examination only in England and then to tell the people of India that absolutely equal conditions existed as between them and Englishmen, was tantamount to telling the Indians that they should be 8 feet 6 inches in height before they could go in for the Civil Service examination. The Director had said that the Board was not meant to meet frequently. He (the speaker) believed it had been convened only once or twice and that since its formation only one subject had been placed before it. In the circumstances it passed his comprehension to make out how it could have justified itself and who was responsible for the position. How in those conditions could either this Board or a Board consisting of Angels from Heaven justify itself? He had not asked for a Board which would be in perpetual session exercising constant control over the administrative acts of the department. That was a misapprehension of what he urged. He believed that the time would come when with regard to every department of Government there would be committees in perpetual session advising the officials and correcting official actions where correction might become necessary. He was aware that that time had not yet come and therefore it was that the humbler proposition that the Board should be only an advisory and not an administrative body had been put forward by him. Did the Sanitary Commissioner in respect of the Sanitary Board or the Director of Industries in respect of the Board of Industries complain that their day-to-day departmental administration was hampered by the existence of those Boards? They placed important matters before those Boards, the Boards met at regular or irregular intervals, and the propositions were discussed and decisions arrived at. In the case of the Board of Industries every resolution was a recom-

mendation to Government. He had yet to hear that any inconvenience was caused to Government by the existence of the Boards. That they had been told that when in the case of such a highly organised body as the Board of Education in England there was nothing more than a consultative body such as their own Board of Education, it was highly premature to have here such a Board as he had advocated. One fundamental factor had been ignored in putting forward that analogy. England was a country with a responsible Government. There was public opinion which made itself felt by the departments, whereas in India the departments reigned supreme and the non-officials simply played the role of putting before the department concerned, either through the Legislative Councils or through public bodies and the press, suggestions which might or might not be given effect to, which more frequently were not heeded. Their Board of Education with its functions enlarged in the manner he suggested would also be a consultative body, but the difference would be that there would be responsible association between selected non-officials and the department. Next, he had been told that the Board of Education was intended to be an expert body and expert bodies were not quite suitable places for popular opinion to be represented in. But he had merely asked for the representation of headmasters and managers of high schools. Was it a part of his resolution that the general public should in any manner be represented? He never made any such proposition. And if headmasters and managers were not experts in matters affecting schools, then he had yet to understand what was the meaning of 'experts'. He had been told that there were already three managers or headmasters on the Board of Education. Yes, there were; but there was this difference. Those three gentlemen were nominated by the Government, whereas according to his resolution, they would be elected by the general body of managers and headmasters. If there was no difference between a person who owed his seat to the nomination of the head of the Government or the head of the department and another person who owed it to the confidence reposed in him by the general body of the persons affected or concerned, then they must have been very unwise people indeed who invented the system

of election. The Director of Public Instruction had complained that he had made severe strictures on his department. He was sorry indeed if that was the impression that was conveyed by his remarks. What he had said was that there was a great deal of feeling in the minds of those who were connected with schools that there was too much of departmental control, and that there was a feeling of dissatisfaction in the minds of parents in general with the educational policy in force, which was not in harmony with the view of popular requirements. Whether the feeling was justified or unfounded, was a matter of opinion. But he could confidently affirm that the existence of the dissatisfaction was not in the region of opinion; it was an unquestionable fact. Assuming for the sake of argument that the dissatisfaction was unfounded, then he would ask them to say whether there was a better means of removing the misapprehension than by the reconstitution of the Board in some such manner as his resolution suggested. And assuming that there was some justification for the feeling he would ask whether there was a better means of removing the causes and the matter of the dissatisfaction than by associating with the department accredited representatives of the schools in the manner he suggested. He had not suggested anything which would hamper the Director of Public Instruction in his day-to-day administration of the department. He had not suggested anything which would in the least curtail the discretion of the Government. He had not sought for any popular representation on the Board. Even if his resolution was accepted the Board would still be an expert body and only an advisory body, and the Government might or might not accept its recommendations. Only, it would be a better constituted and more useful body.

The resolution was put to the vote and lost, 14 voting for and 25 against it.

GOVERNING BODIES FOR COLLEGES.

Mr. Chintamani's Resolution.

The Hon. Mr. Chintamani moved the following resolution:—

'That this Council recommends to His Honour the Lieutenant-Governor to constitute for Muir Central

College and Queen's College governing bodies consisting partly of non-official Indians.'

MR. CHINTAMANI

said that Sec. 21 (1) (a) of the Indian Universities Act provided that a college applying for affiliation to the University should satisfy the Syndicate that the college was to be under the management of a regularly constituted governing body. The regulations of the Allahabad University relating to the affiliation of colleges provided that colleges should fulfil the requirements laid down by the Act. The corresponding regulations of the Punjab University explicitly provided that a college applying for affiliation should submit with the letter of application a statement containing full information regarding the constitution of the governing body and the names of its members. The Calcutta University Regulations, Chap. 8 also provided for such a governing body. A college applying for affiliation, Regulations stated, should satisfy the Syndicate that it was to be under the management of a regularly constituted governing body on which the teaching staff was represented. Again in Chap. 19, the Regulations provided that the authorities of each affiliated college had to furnish information whether it was under the management of a regularly constituted governing body and if so what were the names of its members and what was its constitution. It would be noticed that neither the Indian Universities Act nor the Regulations of the various Universities made any differentiation between Government colleges and private colleges. The Universities Act stated that there must be regularly constituted governing bodies. In pursuance of that Provision of the Act the Presidency College of Calcutta had a governing body of which at least one of the members was an Indian non-official gentleman. That gentleman at present happened to be Dr. Deva Prasad Sarbadhikary. The functions and powers of that governing body seemed to be fairly comprehensive. He would not read all the rules that had been laid down but would read only those which he regarded as the most important. The governing body of the Presidency College, the rules said, had to examine and pass the college accounts; to control the expenditure of all sums of money

which might be allotted by Government for the maintenance of the college subject to such conditions as Government might impose; to control, examine, and initiate projects for the improvement of the college. (No building project should be submitted to the Director of Public Instruction before it had been approved by the governing body, nor should work be commenced in connection with any project before the plans had been passed by that body) to determine the general scheme of studies of the college, subject to the limitation imposed by the sanctioned numerical strength of the staff and to such conditions as might be laid down by Government; to advise Government through the Director of Public Instruction with regard to the inclusion of additional subjects in the scheme of studies; to deal with all serious breaches of discipline involving possible expulsion of one or more students. Whenever an appointment other than in the Indian Educational Service became permanently vacant the governing body would call for applications and would elect the candidate whom they judged to be most qualified for the post. The nomination of the governing body would in the case of appointments carrying a salary of Rs. 200 and upwards, required the confirmation of Government. In the case of appointments on less than Rs. 200 outside the grades, and appointments with a fixed minimum pay of less than Rs. 200, the election of the governing body, subject to the terms of rule 5, was final. If a post in the college became temporarily vacant the governing body would make a temporary appointment subject to the confirmation required by rule 2. No officer would ordinarily be transferred by Government from the college without the approval of the governing body. A general maintenance grant representing the grants formally made for library, laboratories, supplies and services and contingencies and including the grant for general improvements, would be made for a term of years and placed at the disposal of the governing body. It would be seen from these that the governing body of the Presidency College was not a sinecure but had real powers and responsibilities. The principle of appointing such governing bodies in the case of Government colleges was not unknown in these provinces. There were no such governing bodies in the case of the two

Arts colleges, it was true, but there were other Government colleges, such as the Roorkee College and the Agricultural College at Cawnpore which had governing bodies with non-official members. In the case of the Roorkee College his Hon. friend Dr. Sunder Lal was one of the members of the governing body; one of the professors of Aligarh College was another member and the late Hon. Rai Prag Narain Bahadur was a third member. In the case of the Agricultural College the Hon. Lala Sukhbir Singh was one of the members of the Committee. So, the principle of having governing bodies was recognized by the local Government in the case of what might be called the professional colleges.

Not merely was his proposal in conformity with the provisions of the Universities Act and the Regulations of the University but there were also several practical arguments in support of the proposition. Much private liberality contributed to the foundation and development of these colleges. In the case of Muir Central College, the statement giving a history of the college in the University Calendar would show that at its inception private liberality was appealed to and was availed of. In the case of Queen's College private liberality contributed towards its development, at least of the Sanskrit section. There were endowments, scholarships and prizes furnished by private philanthropy. The direct Government expenditure on the colleges came out of the tax-payer's money. The case of Government colleges stood altogether on a footing different from that of private colleges. A private college was generally started by a single individual out of his own money and he maintained it out of his own money. He was not accountable to any outside authority for the manner in which he disposed of his money, except to the University in regard to certain matters; but in the case of a Government institution the money spent on it being public money a certain amount of public control was a very reasonable thing to insist upon and such control—they might call it association if they liked—of non-officials was known to the Government in Bengal generally and in these provinces in the case of the professional colleges. It might be asked what business had non-official Indians to be on such bodies; it was only educational experts who should have

any voice in the determination of matters relating to colleges. But when this argument was put forward it was forgotten that there were the interests of the parents and students which should also be represented on the body. If any layman claimed any voice in the consideration and determination of any matter on which only an educationist was competent to express an opinion, that claim could be repudiated. But there were many matters connected with the management of the institutions upon which parents could claim to have a say. That the principle was conceded was evident by the constitution of a governing body for the Presidency College and of committees for the professional colleges here. Occasionally unpleasant incidents in colleges came to public notice. He personally believed that very often there was misapprehension in the minds of the public with regard to those incidents which could be very easily removed if only it was known that the Principal acted in consultation with persons in whom the public had confidence. Again in the matter of admissions and refusal of admissions he personally felt that there would have been less of the present complaints if these Government colleges had governing bodies.

THE DIRECTOR OF PUBLIC INSTRUCTION said that he was sorry that he found himself again in opposition to his Hon. friend Mr. Chintamani. He (Mr. Chintamani) based his case upon the illegality of the Government maintaining a college without a properly constituted governing body and he referred to section 21 of the Universities Act in support of his case. Sec. 21 referred to the case of colleges applying for affiliation. Government colleges were colleges which had been in existence before the Act of 1904 was brought into existence, and if the Hon. member would refer to Sec. 21 of the Universities Act he would find that any college affiliated to the University before the passing of the Act might continue to have the right conferred upon it by such affiliation and such right might be withdrawn in the exercise of such powers conferred by the Act. So, there appeared to be a distinction between a college applying for affiliation and a college affiliated before the passing of the Act, and the Government and the Allahabad University were not acting in contravention of the Indian Universities Act.

Only one University in India thought it necessary to frame regulations requiring all colleges whether affiliated before the passing of the Act or subsequent to the passing of the Act, to have governing bodies. If the Hon. member would turn to the regulations of the Madras University he would find that those regulations did not insist upon a Government college having a body constituted in the way he proposed. The same was true of Bombay and the Punjab. In fact, the only University in which governing bodies such as he proposed were actually required under the regulations was the Calcutta University.

Turning to the question as to whether or not it was advisable to have governing bodies as was suggested by the Hon. mover, partly composed of officials and partly composed of non-officials, he would have liked the Hon. mover to have developed more in detail the functions which he thought it was necessary or advisable to make over to the governing bodies of Government colleges. The appointment of the staff should, he thought, rest with the Government in so far as the appointment did not already rest with the Secretary of State. In regard to the finances of the colleges, the preparation of the budget was a matter which concerned the Financial Department of the Government and he felt quite certain that the Hon. Mr. Pim would not accept a budget prepared by a governing body which did not come within the limits which the Government was obliged to impose for institutions which it maintained. So, a governing body would have practically nothing to do in matters of finance. When they turned to the question of discipline and to the admission of students, points to which his Hon. friend the mover referred, if a governing body were to interfere in the question of admissions with the authority of the Principal it would be acting against Regulation 9 of Chapter XI of the University Regulations by which the University had expressly given to the Principal full authority in matters of discipline. The University, he felt quite sure, would resent any interference with the authority of the Principal of any college by the governing body. So, one of the objects with which Mr. Chintamani moved his resolution would be defeated by the existence of the regulation of the University. Up to the present no demand had been made either by

the parents or by students for the substitution of a governing body for the management of a college by Government itself. As Mr. Chintamani was so fond of telling them these colleges were so popular that it was necessary to refuse admission to numbers of students. There was nothing in the present arrangement which made it an urgent matter to alter the present system of management. Mr. Chintamani suggested that if there were governing bodies for the colleges here probably there would be fewer unpleasant incidents in them. He did not know what were the unpleasant incidents that he referred to. He could assure him that notwithstanding the governing bodies unpleasant incidents occurred under the jurisdiction of the Calcutta University. So that a governing body such as he proposed would not prevent the occurrence of such incidents.

THE HON. M. NARYAN PRASAD ASTHANA

in supporting the resolution said that the main object of the resolution was to secure association of non-officials in the administration of colleges. It had been said by the Director of Public Instruction that there had been no demand from parents for such institutions as the Hon. mover proposed. The mere fact that the resolution had been introduced showed that there was a demand. Then, it had been said that the functions which should be given to the governing bodies had not been developed. But Mr. Chintamani quoted the rules of the governing body of the Presidency College and from those rules they would find what should be the exact duties of the governing bodies. As regards the appointment of professors it was not said that the governing body should appoint professors. They would have only the power to nominate a professor and the final choice would rest with the Government. As regards finances, the governing body would only exercise a wholesome check upon the expenditure of the colleges. As for discipline it was not stated that the governing body should interfere with the Principal in his daily routine, but in serious cases the help of such a body would be useful.

THE HON. MR. O'DONNELL

said that there was little that he need add to the remarks of the Hon. Mr. de la Fosse. The main

argument of the Hon. mover seemed to be that because the institutions were maintained from public funds there should be public control. It was obviously a proposition which could not be accepted without qualification and without reference to the special circumstances in each case. If by public control was meant control by public opinion, had not the Hon. member overlooked the fact that the controlling body was the Allahabad University. It was the case, as the Hon. member observed, that there were some Government colleges in this country which had governing bodies, but there was nothing to suggest that such colleges were better or more efficiently managed than the colleges which were managed by the Government and its officers and there was certainly nothing to suggest that they were better managed than the colleges here. The Government were unable to accept the resolution.

THE HON. MR. CHINTAMANI

in replying to the debate said that both the Hon. members who had spoken in opposition to the resolution knew as well as he did that parents who were not entirely satisfied with any of the educational institutions in the province, were not at liberty to give practical expression to their dissatisfaction by withdrawing their sons from institutions, for the best of reasons that nearly every institution was so overcrowded that their sons would have to go without education if they would exercise their liberty in that manner. Therefore, while associating himself whole-heartedly with the Hon. Mr. O'Donnell in the remarks which he made on the present position of Muir Central College, which under its present Principal was certainly popular, he must demur to the conclusion he would draw from the fact of the overcrowded condition of the colleges, that they must be popular. If there had been a governing body for Queen's College he did not think that the position would have arisen of which he had complained at the last meeting of the Council. He did not take up the position that any illegality was perpetrated by Government by not constituting governing bodies. The Director of Public Instruction pointed out that Sec. 21 of the Universities Act protected the colleges which had no governing bodies. Un-

fortunately neither the Director nor himself was a lawyer, and speaking with the diffidence that became a layman he said that he had his doubts whether Sec. 21 had not a restricting effect on Sec. 20. Mr. de la Fosse had complained that he had not said more about the functions of a governing body. But he should have thought that the rules which regulated the functions of governing bodies in Bengal the more important part of which he had troubled the Council with would have made it clear that there would be ample functions for such governing bodies to perform. He thought that the existence of such governing bodies would make the atmosphere of these institutions more liberal than it was at present. It had not been shown that the work of the institutions in Bengal suffered from the existence of the governing bodies. A point had been made of the occurrence of an unpleasant incident or two in the Presidency College which had a governing body. He too had read the facts of that unpleasant incident and the conclusion which he had been inclined to draw was quite the opposite of that to which the Director of Public Instruction had come. If the governing body had had more to do with certain affairs in relation to Presidency College, if its Principal could have been disciplined a little more by the governing body, he thought that there would have been less of these incidents as the report of the Committee presided over by Sir Asutosh Mukerjee led him to believe.

The resolution was put to the vote and lost, 10 voting for and 23 against it.

PATNA UNIVERSITY BILL.

"FUNDAMENTALLY ERRONEOUS."

The following report has been submitted by the Committee recently appointed by the Calcutta University to record its opinion on the Patna University Bill:—

We, the members of the Patna University Bill Committee, have the honour to submit our report.

The statement of objects and reasons appended to the Bill assigns two grounds for the foundation of the proposed University, namely, that the constitution of the new University will enable the province

of Bihar and Orissa to obtain a University of its own and will effect some reduction in the large number of students now under the jurisdiction of the University of Calcutta. We are of opinion that the Senate should welcome the establishment of a new University, provided it is so constituted as to be an efficient instrument for the advancement of learning among the people of the province of Bihar and Orissa.

In view of the admitted fact that the constitution proposed for the new University is materially different from that of the older Indian Universities, which was framed after an elaborate investigation by the Indian Universities Commission of 1902 followed by protracted debates in the Imperial Legislative Council in 1904, we maintain that those who advocate a serious departure from a constitution so settled, should have stated in detail the reasons for their action. The statement of objects and reasons appended to the Bill, however, furnishes no clue to the grounds of this departure.

A careful study of the provisions of the Bill shows that the proposed University is intended to be a combination of a Teaching University and a Federal University. It is not necessary here to consider whether it is possible to devise a constitution which will be adequate for the purpose of a combined Teaching University and Federal University, in view of the scopes and spheres of work. It is sufficient to state that in our opinion the fundamental difference between their scheme contained in the Bill is, from an academic point of view, entirely unsuited for the double purpose. A Teaching University has two essential implications, namely, first that the University should control all the teachers in every subject and in every standard, and secondly, that the system of University administration should be such as to leave a really effective control over all purely academic questions to the recognised teachers of the University. A Federal University, on the other hand, must be so constituted as to be in close touch with its constituent colleges which, in the case of an extensive province like Bihar and Orissa, must be separated by long distances and must grow up under diverse local conditions. On the Senate of

such a University, the constituent colleges and their teaching staff are entitled to be adequately represented; leading members of the educated community of the Province, though not actually engaged in the work of teaching, are also entitled to seats on such a Senate possibly to a larger extent than in the case of a true Teaching University. From this standpoint, the constitution of the proposed University fails to satisfy the needs of a Teaching University as also of a Federal University. There is no guarantee, in fact, that the Senate or even the Syndicate will be a really academic body or will represent all the educational interests of the province.

Subject to these general observations we desire to emphasise that the Bill as it stands has grave defects from a purely academic point of view. The Bill seems to indicate that the teachers of what is called the "College of the University" will not be officers of the University, in the strict sense of that expression (see Clause 12). We are of opinion that if a Teaching University is established, the teachers, whether paid out of funds contributed by the State or by private benefactors, should have the same status, namely, they should all be subject to the control of the University and the University alone, and should have perfect freedom to act according to their judgment in matters academic; any other position is fundamentally wrong from an academic standpoint. We are also of opinion that the ultimate control in all academic matters should rest with the Senate of the University and should not be vested in any external authority. It is necessary to elaborate this matter with reference to one or two provisions of the Bill.

The Bill provides that the first regulations shall be framed by the Local Government [Clause 14 (2)]. The expression "Local Government" signifies the Lieutenant-Governor in Council. With all respect for persons who occupy the exalted position of the ruler of a province or of his councillors, we may be permitted to point out that as they are not likely to have followed the profession of education they cannot be expected personally to take any part in the framing of a complete body of regulations intended for a new University. We are therefore strongly

of opinion that the task of framing the first body of regulations, should be entrusted to the Senate. Similar observations apply to the provision which requires the previous sanction of the Local Government to all proposals for addition to the regulations or for amendment or repeal thereof. Another provision of the Bill [Clause 5 (5)] is, in our opinion, equally open to grave objection on academic grounds analogous to those just indicated. This provision authorise the intervention of the Chancellor in the administration of the University on any occasion he deems expedient. As the Lieutenant-Governor of Bihar and Orissa will be ex officio Chancellor, one may be permitted to doubt the propriety of intervention in matters purely academic by the Head of the Local Government in the manner proposed.

We do not propose to enter into a detailed examination of each provision of the Bill, but we may state that the general impression created by a scrutiny of all the clauses is that the framers of the Bill had one paramount object in view, namely, to secure for the Local Government the maximum of control in all academic matters in the so-called University. We may illustrate this by reference to some of the leading provisions. Besides the unlimited power of intervention conferred on the Lieutenant-Governor, the Bill provides that the first Syndicate will be named in the Act when it comes into force, and that on all future Syndicates, there will be four nominees of the Lieutenant-Governor. The Syndicate is to consist of sixteen members, of whom three will be members ex-officio, namely, the Vice-Chancellor (a salaried official), the Director of Public Instruction and the Principal of the Patna College—all three appointed by the Local Government. Nine places are left to be filled up by election by the Senate, which is to consist of 8 ex-officio Fellows and 40 to 60 Ordinary Fellows of whom 70 to 80 per cent. will be nominated by the Lieutenant-Governor. Of these nine members, not less than five shall be members of the University staff or of the teaching staff of the Colleges of the University. In this connection, we must remember that under Clause 12, it is the Lieutenant-Governor who appoints the University staff. Consequently, it is conceivable that all the nine elected members may be members of the staff as appointed by the Lieu-

tenant-Governor, and there may not be on the Syndicate a single representative of what are called the external Colleges. From an educational point of view, this is not satisfactory. The full significance of the possibilities of the proposed constitution is, however, realised only when we find that the government of the University is really vested in the Syndicate, and the Senate is assigned the position of a deliberative body whose expressions of opinion do not in any way bind the Syndicate. Attention may here be drawn to the fact that there is no clear demarcation between the powers and duties of the Vice-Chancellor and of the Syndicate; the former is described as the principal executive officer of the University, but as we read the somewhat vague description of the functions of the Syndicate contained in Clause 7 (4), the executive government of the University is vested in the Syndicate. The position of the Vice-Chancellor is also in some respects anomalous, as he combines in himself executive and judicial functions. He is for instance, authorised to inspect external Colleges, and he is also required to preside at meetings of the Syndicate, where he may be called upon to decide whether a College should not be condemned by the Syndicate on the basis of an inspection report submitted by himself.

We are finally of opinion that the Bill exhibits an unwise attempt to petrify present conditions and to impose needless restrictions in various matters. To take one illustration, a College in order that it may become a College of the University must, for some unexplained reason, be situated within precisely one mile from the Senate House. Again, external Colleges can in future be established only in four specified centres, where Colleges now happen to exist. The framers of the Bill it seems, have not given due weight to the fact that local conditions may alter in unforeseen directions, and that as the legislative machinery is difficult to move, limitations should be introduced very sparingly into a legislative measure of this description.

On the whole, the conclusion appears to us inevitable that the Bill has been framed on lines fundamentally erroneous from an academic standpoint. If the Bill be passed into law, it will create a new Depart-

ment of Government to control high education in the province of Bihar and Orissa. But it will not create a University in the sense that expression is understood in British seats of learning; the new institution will lack the element essential for vitality and normal growth, namely, freedom in academic matters from non-academic control and interference. The entire problem of the constitution of a new University in a new Province requires re-examination from this standpoint; and we are emphatically of opinion that the Senate should respectfully urge this upon the Government of India that, unless the Bill can be substantially altered so as to be unobjectionable from an academic standpoint, the further progress of this measure through the Council should be stayed for the present in view of the announcement made by His Excellency the Viceroy that a University Commission will shortly be appointed. It would, we venture to think, be a distinctly of a novel type just when the whole question of University education is about to be submitted to competent educational experts.

(Sd.) Ashutosh Mookerjee,
 „ Gooroo Dass Banerjee,
 „ Nilratan Sircar,
 „ Brajendranath Seal,
 „ Satis Ch. Ray,
 „ Madhusudan Das,
 „ George Howells,
 „ D. N. Sen,
 „ Dwarka Nath.

29th Jan., 1917.

THE MADURA COLLEGE: THE DAY CELEBRATION.

SIR SUBRAMANIA AIYAR'S ADDRESS.

THE TOAST OF THE "COLLEGE."

Dr. Sir S. Subramania Aiyar, one of the oldest pupils of the institution, was to have proposed the toast of the "Madura College." In his unavoidable absence, his speech was read out by Mr. K. R. Srinivasa Aiyar. In the course of his speech, after referring to his student career at Madura, he said:—Turning now to the present, this institution is but one evolved out of the school which was established

in Madura so far back as 1856 and which was an outcome of the earliest attempt to introduce English education into the mofussil under Sir Charles Wood's Despatch of 1854. The great growth in the strength of the institution and the ever-increasing demand for facilities for higher education for all classes have for long, made a first-grade college a serious desideratum in this part of the Presidency. And it is no small satisfaction to find a friend coming forward at the nick of time and helping towards the want being supplied. Of course, I refer to Rao Bahadur Annamalai Chettiar, well known for his philanthropic inclinations and charitable deeds. With the munificent endowment of three lakhs of rupees which he has undertaken to make and the very liberal grant which the Government is expected to sanction, we shall, within a few months, realise our cherished hope of starting a first-grade college in this city, the one best suited for the purpose, in every way and the most central in the three districts of Madura, Ramnad and Tinnevely, whose needs in the matter of education should be adequately provided for. In thus realising our cherished hope, let us remember we would be but making a beginning. Our great aim should be to equip the institution in such a way as to make it worthy of the ancient capital of Pandyas, the seat of the famous hoary Dravidian colleges known as the Sangams. To accomplish this would not at all be difficult if the members generally of the wealthy community to which Mr. Annamalai belongs on the one hand, and Rajas, Zemindars, and Poligars in these districts on the other, will be pleased to co-operate and earnestly take the matter in hand.

NATTUKOTTAI CHETTIES AND EDUCATION.

What is important is the deliberate and steady recognition by them of the fact that education demands at the present moment more than any other object of public utility, patronage and liberal support at their hands. Surely it would be but right for the former to devote to education henceforward at least a portion of the wealth which with a lavish hand they spend annually on temples with astonishing rivalry among themselves. Dewan Bahadur Ramaswami Chettiar, whose large contributions towards the cause of the water-works, etc., at Chidambaram marked the first and remarkable departure in the

usual course of Nattukottai benevolence, stated in his speech before the Committee which met to discuss the question of the amendment of the Religious Endowments Act, that not less than between one and two crores of rupees had been sent by the members of his community in the mere renovations of temples within the last fifty or sixty years. And may we not appeal to the members of that community some of whom among the richest merchants in the Presidency and than all of whom none are more charitable—may we not appeal to them to give a strong impetus to the advancement of education in these parts, remembering that the gift of knowledge is according to the Hindu belief, the noblest of all gifts. Next, so far as Rajas and Zemindars are concerned, having regard to the status they occupy in society, may we not also say to be patrons of learning is almost a duty devolving on them as the representing aristocracy in the land. And I would venture to add that, if they would only utilise the resources available to them, they would be able to contribute each in his own way and measure materially towards the object in view without a strain on their purse, and if the endowments attached to numerous choultries, chatrams and the like in the different estates, the maintenance whereof has become in the altered conditions of the country or less superfluous and what are called "dharma magamai, collections are applied towards the creation of professorship for different subjects in the college, they would be taking really a forward and most useful step. In this respect the Rajah of Ramnad and Sivaganga occupy an advantageous position. Along the old highways to Rameswaram which run through their Zemindaries will be found choultries that can no longer serve the public as they did in the past in these days of Railways and motor-vehicles. Nor would the diversion of these endowments in question in the way suggested by me be otherwise than consistent with the usage of the country of which Raja Sharboji's letter addressed 115 years ago to Colonel Blackbird, the Resident at Tanjore, furnishes striking evidence. In that letter the Rajah points out that from the days of his ancestors the endowments granted by them to the chatrams at present under the management of the Local Boards had

been in part applied towards the maintenance of schools for the imparting of religious as well as secular instruction. The Thiruvadi Sanskrit College improved and maintained by the Local Board is an actual instance in point.

DIVERSION OF TEMPLE SURPLUS FUNDS.

Another source to be resorted to is the surplus income of such rich temples as Madura, Rameswaram and Kunnakudy Devasthanam and certain of those under the management of the Rajahs of Sivaganga and Ramnad. The incomes of some of these institutions have been rising by leaps and bounds without any additional expenditure becoming necessary. No one can raise any question as to the perfect legitimacy of the utilisation of such surplus funds towards education. The notion that the funds of Hindu public temples should be devoted solely to rituals and festivals is due to ignorance of the immemorial practice of the country which fell into disuse only during the present foreign rule. One of the weak points of this rule is the utter lack of supervision over which such public religious institutions notwithstanding its recognition of its duty in the matter as set forth in the preamble to Regulation VII of 1816 which, so far as it is unrepealed, has been for over a three-quarter of a century a mere dead letter. The true character of the practice in question is now established by undeniable evidence brought to light within the last three or four years.

AUTHORITY FOR THE POSITION.

Special thanks are due to Rao Sahab H. Krishna Sastrigal, the able Assistant Superintendent of Epigraphy, for pointedly drawing attention to certain inscriptions unearthed by his department that education, general and special, enjoyed their fair share in the expenditure of temple revenues under the control of public authority. One of these referred to a college for the study of grammar maintained under a grant of one of the Chola kings in the Tiruvottiur temple. The other inscription is the one at the Maha Vishnu temple at Tirumukudal referred to by Mr. Krishna Sastrigal in his latest report reviewed and recorded in G. O. No. 99 of the 29th August last. And this perhaps is the most instructive as yet made known by the Epigraphist. It records a grant by the Chola ruler Virajendra Thevar (A. D. 1062 to 1067.) which shows the existence in the temple a school for the study of Veda sastras and grammar, hostel for students and a hospital. All this is not surprising considering that the Agama treatises of both Sivites and Vishnavites enjoin provision being made for the promotion of learning in connection with temples and some of them lay down rules as to where the school rooms should be located in the temple premises.

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STUDY OF SANSKRIT AND TAMIL

Taking now the Madura temple out of the three that I have specially referred to by name: Why should not the present Trustee of it Mr. Ananthanarayana Aiyar, who has been so ably administering its affairs as to nearly double its net revenue during his tenure of office, endow a chair in the College for the study of Tamil not less important than Sanskrit, more ancient than it and possessing a splendid literature? And what stronger authority can there be in favour of taking such a step than the last Sangam at least met and carried on its great literary work under the auspices of the Goddess Meenakshi in the long corridors surrounding the golden lily tank on some of the pillars of which one or two leading Sangathars will be found carved and with reference to whom a shrine even exists to-day in another part of the temple?

As regards Rameswaram, the scheme in force allows the expenditure of Rs. 500 a month on a school which after much contention, has begun to do some good work. It is well worth considering whether the expenditure of that amount would not be to greater advantage if the same be devoted towards the maintenance of a couple of professors in the college instead of as at present on the school staff. Be this as it may, I know for a fact that the Hon'ble Sir P. S. Sivaswami Aiyar at whose instance as Advocate-General the expenditure of Rs. 500 was sanctioned in the same decree, intended later on to apply for a larger allotment. A few months back I took the liberty of broaching the subject of a chair being founded in the college out of the funds of the said temple to the Hon'ble the Rajah of Ramnad when I met him at Thiruvadamathur. Though during the very brief talk I had with him he did not seem quite favourable to the adoption of my sugges-

tion yet, I hope, he will see his way to persuade himself and his colleagues on the Board of Management of the Temple in question and arrange with the necessary sanction of the Court for the temple to endow one or two professorships in the college for the promotion of study of Sanskrit, Comparative Philology, etc. The sum required for the purpose will be small indeed in comparison with the increase which, if I am not mistaken, has been made by the late Trustee under heads connected with mere shows during festivals.

It only remains to add that if the landed aristocracy, the wealthy merchants and other well-to-do classes in the community would earnestly work together the project of a University for this part of the Presidency would become more than a dream at no distant date. That very favourable conditions for the realisation of such a project exist in this city and in its neighbourhood admits of no doubt. For in addition to this college and the Mission College on the other side of the river there is more than one technical school in addition to a Railway workshop. I must not omit to mention the Sangam rendering valuable service under its President the Hon'ble the Rajah of Ramnad and its Vice-President the cultured Pethachi Chettiar, Zemindar of Andipatti. And it is to be fervently hoped that the local public will rise to the occasion and succeed in founding a University that would uplift the people. That the vernacular language of the districts should have a prominent place in the curriculum of studies of such a University, in my humble judgment, can no longer be treated as a moot point.

In Active Preparation.

COLLEGE ALGEBRA

*A Text-book for the Intermediate and
B.A. Classes*

BY

K. R. RAMASWAMI AIYANGAR, M.A., L.T.
Professor of Mathematics, College of Engineering, Madras.

Srinivasa Varadachari & Co., Madras.

PUBLIC SERVICE COMMISSION REPORT.

EDUCATION DEPARTMENT.

(i) The present educational officers in each province should be regrouped into separate bodies, according as they belong either to the administrative branch or to a particular college or lie outside these two groups in a special class. No charge from one main group to another should ordinarily be permitted, but transfer from the staff of one college to that of another should be allowed.

(ii) Both the administrative and the collegiate branches of the department should be organised on the basis of the work to be done into two classes. The present division into imperial and provincial services should be abandoned. The details of this reorganisation should be worked out by each Local Government.

(iii) The cadre of the present Indian Educational Service should be increased by at least one-third to form the new Class I, Class II should be as large as the work to be done requires.

(iv) Members of the collegiate staffs who are class I officers should be called lecturers; those who are class II officers assistant lecturers or demonstrators and members of the subordinate service teachers in their particular subject. The use of the title "professor" should be restricted to University Professors or to persons specially authorised to use it as a reward for original work.

(v) Twenty professorships should be created for the higher branches of study, either through the medium of grants-in-aid to the Universities or by additions to the college staffs, or through the formation of a central institute of arts and sciences.

(vi) Approximately three quarters of the number of posts in class I as reorganised should be recruited for in Europe, provided that suitable candidates are forthcoming, and one-quarter in India. As new posts are created recruitment in Europe and India should be so adjusted that the additional officers will be taken half from the one country and half from the other.

(vii) Class II should be recruited for in India.

(viii) Special posts, in which category should be included any headmasterships not of class I standing which it may be desired to fill from Europe, should be treated on their merits. The proposed

twenty new professorships should be filled by the best persons available whether from India or from Europe.

(ix) Special efforts should be made to provide for the due representation of the various communities on the administrative side of the class II staff, so far as this is compatible with efficiency.

(x) On the administrative side half the class I parts which are to be filled in India should be reserved for direct recruits and half given to class II officers provided qualified candidates are available. On the collegiate side the proportions should be two-thirds and one-third respectively. The proportion of class II parts to be filled by promotion from the subordinate service should be left to be determined by the local authorities.

(xi) The member nominated to represent local experience on the Committee which advises on selections for the Indian educational service in the United Kingdom should not have left India more than five years beforehand. An Indian in touch with the Indian Student community in the United Kingdom should be added to the Committee, and more personal touch should be established between the Committee and individuals interested in the cause of Indian education in the various Universities and educational institutions in the United Kingdom. The Committee should interview likely Indian students before their return to India, even though there may be no vacancy to be filled.

(xii) Committees of five members should be set up in each province to advise on the selection of candidates for direct appointment in India to class I or class II of the service. Appointments in India to class I should be made by the Government of India and to class II by the Local Governments. In cases involving technical qualifications specialists should be consulted if necessary.

(xiii) Promotion from class II to class I should be made under the orders of the Government of India on the recommendation of Local Governments and from the Subordinate Service to class II under the orders of Local Governments.

(xiv) Where an officer appointed directly to class I in India has not had full teaching experience or training in research methods, he should be treated as a probationer and not be confirmed until he has acquired the same experience and is of the same age to his colleagues from Europe. Where such an officer has not been educated in a European Uni-

versity, power should be taken to require him to go to Europe for a term of post-graduate work. Officers appointed directly to the administrative side of class II should be graduates of an Indian University or of a University in the United Kingdom or should hold an equivalent qualification. Officers appointed directly to the collegiate side should possess ordinarily the M.A. or an equivalent degree.

(xv) Recruits to the Indian Educational Service who are selected in England should be on probation for two years. Officers other than the probationers referred to in paragraph who are appointed to class I, class II or any special appointment in India, should also be on probation for two years.

(xvi) Before taking over independent charge of a Chief Inspector, a directly appointed officer on the administrative side of class I should have worked under the supervision of a headmaster for one year and thereafter as a headmaster for four years.

(xvii) A departmental test should be instituted to ensure that every administrative officer in class I is able to test the teaching of a class in the Vernacular. A less severe test will suffice for collegiate officers and the Local Government should have power to exempt teachers of specialist subjects from passing any language test. Training Colleges should be developed so as to provide adequate training for officers of the administrative branch appointed directly to class II.

(xviii) Incremental scales of pay should be adopted both for class I and class II. In class I there should be different scales for about the first 18 years of service for recruits who are appointed in England and in India respectively. Salaries should be increased to the extent stated both in class I and class II.

(xix) Local Governments should at once consider the additional staff required in both class I and class II to meet the increased needs of education.

(xx) On the administrative side of class I additions should be made to the cadre for leave and deputation reserves based on the actual requirements of the last five years. A small training reserve should also be provided. On the collegiate side of class I a small reserve should be kept by the Government of India to fill unexpected vacancies in the more popular chairs.

(xxi) The orders regarding the selection of Directors of Public Instruction should be qualified to lay stress on the need for local experience and adequate seniority.

(xxii) The Directorships of Public Instruction should be open to both branches of the service.

(xxiii) Director of Public Instruction should be given regular and direct access to the head of the province, or the member in charge of education where there is a council form of government.

(xxiv) All future entrants to class I who when they enter the service, draw salary at the lower of the two rates propounded, should come under the Indian service rules, and should continue under them throughout their careers. Other officers should come under the European service leave rule, Class II officers should be under the Indian service save rules. A separate decision should be taken on the merits in the case of special appointments. The taking of study leave should be encouraged in the collegiate branch.

(xxv) Members of class I and of class II subject to the general provisos, should be permitted to reckon as service qualifying for superannuation pension the number of completed years by which their age at the time of appointment exceeded 25. Directors of Public Instruction and officers selected to fill posts in the grade of Rs. 1500-50-1750 a month should be eligible for—special additional pensions.

(xxvi) There should be a women's educational service to comprise Class I. Class II and special appointments and the rules for recruitment laid down in the case of men should be followed as closely as possible.

(xxvii) Women who are selected in England should be recruited in the first instance for five years and the salaries paid to women should be enhanced to the extent stated.

(xxviii) More women are required for educational work. In particular a leave reserve should be provided.

(xxix) A special inquiry should be made as to the adequacy of the travelling allowances and arrangements for women, the suitability of their leave rules and the working of their present pensionary system. If the present pensionary system is kept, the period of service for full pension should be reduced to 25 years, and optional retirement should be allowed on reduced pension after 20 years.

Class I.

PRESENT SCALE.

No.	Name of Appointment.	Pay of each. Rs.	Cost per mensem. Rs. A. P.
1	Director of Public Instruction.	2,000—100— —2,500	2,333 5-4
27	Members of the Indian Educational Services.	500—50— 1,000	23,509 11-10
2	Personal Allowance.	150—50— 500	833-5 4
2	Personal Allowance.	200—0— 250	466-10 8
	Exchange Compensation Allowance.	...	1689 8-0
28		Total Rs.	28 832-9-2

PROPOSED SCALE.

No.	Name of Appointment.	Pay of each. Rs.	Cost per mensem. Rs. A. P.
1	Director of Public Instruction.	2,250—100— —2,750	2,583 5-4
3	Appointments ...	1,500—50— —1,750	5,000-0 0
4	Appointments ...	1,250—50— —1,500	5,666 10-8
29	Appointments (recruited in Europe)	550—50— 1,250	20,034 11-4
	Appointments (recruited in India)	350—50— 1,250	5,463 9 0
	Allowance to one Principal.	250	250-0 0
	Allowance to three Principals.	150	450-0 0
37		Total ...	39,448 4 4

Class II.

PRESENT SCALE.

No.	Name of Appointment.	Pay of each. Rs.	Cost per mensem. Rs. A. P.
3	Officers I Grade	700	2,100-0 0
3	do II do	600	1,800-0 0
3	do III do	500	1,500-0 0
3	do IV do	450	1,350-0 0
4	do V do	400	1,600 0 0
5	do VI do	350	1,750 0-0
6	do VII do	300	1,800-0 0
6	do VIII do	250	1,600 0 0
8	do IX do	200	1,600 0 0
41		Total ...	15,000 0 0

examination there ought to be a number of examiners and a number of fellow examiners and so on, there was no legal difficulty whatever. The compartmental system was not likely to be very largely dominated by the moderation system, when the number of candidates for the examination was small. When the number was appreciably high, the need for moderation would arise. It was said that the number of candidates appearing for the Matriculation Examination was small and therefore there was no need for a Special Board. To that he would say they might have the same Board for the Matriculation Examination as for the Intermediate Examination. With these words he moved the following amendment:—

"And the words 'the Syndicate shall appoint the Chairman of each Examination Board. There shall be moderating Boards consisting of the Chairmen of the Boards consisting for the subjects or groups of subjects comprised in the Matriculation Examination and the Intermediate Examination in Arts. It shall be the duty of such moderating Boards to co-ordinate and if need be to moderate the marks obtained by the candidates in the Matriculation Examination or the Intermediate Examination in Arts as the case may be in the several subjects in which they were examined and to declare the names of the candidates who have passed after such co-ordinating and moderating, if any,' be added to the Regulation."

Mr. Ramunni Menon rose to a point of order and said that it would clash with regulations 177 and 185.

The Vice-Chancellor ruled that the amendment was in order.

Mr. A. Rangaswami Aiyangar seconded the amendment.

Rao Sahab G. Venkataranga Row in opposing the amendment said that in Regulation 177 there was no reference made to Moderation Board. It was not legally justifiable. It was the examiners, and not the Moderating Board, that should declare that examiners were fit to pass.

Mr. Davis in supporting the amendment referred to the practice in the London University and Scottish Universities and said that at present the University had no power to check any Board of Examiners. There should be some machinery whereby some consistency should be maintained in the result of each year. There should be no remarkable ups and downs in the results. Special Boards were necessary. He accepted the principle of the amendment but not the details. The Board should consist of a workable number of

persons. A small Committee consisting of Mr. Hunter, Dr. Skinner, Mr. C. P. Ramaswamy Aiyar, Mr. Govindaraghava Aiyar and himself might be asked to go into the question.

Mr. J. H. Stone said that the Committee suggested by Mr. Davis would really take up the work *de novo* in spite of the Syndicate going on with it. Mr. Govindaraghava Aiyar might drop the amendment which was to appoint a Moderating Board consisting possibly of as many as 80 persons. He, the speaker would like to see some reasonable arrangement made, to have some Board which shall supervise the examinations and declare who had passed and who had failed. He explained the present procedure adopted by the several colleges of the Syndicate. They were not satisfied with things as they were. Therefore, if Mr. Govindaraghava Aiyar dropped his amendment, it would be best for them to go on with the matter.

Mr. G. A. Natesan said that if Mr. Govindaraghava Aiyar withdrew his amendment and if Mr. Ramunni Menon also withdrew his motion, the Syndicate would have all the present powers and would continue to do things as they had been doing for many years and there would be no difficulty.

Mr. Hunter said that if Mr. Ramunni Menon's resolution was withdrawn, Mr. Govindaraghava Aiyar's amendment would drop.

Mr. Govindaraghava Aiyar was prepared to withdraw his amendment provided Mr. Ramunni Menon withdrew his resolution.

The resolution was withdrawn, and consequently there was no amendment before the meeting.

UNIVERSITY PROFESSORS.

Regulation 96 (iii) gives power to the Syndicate "to nominate University Professors and Lecturers, to define their duties and fix their remuneration and to report any such proposed arrangements to the Senate for its sanction."

Mr. Mark Hunter moved for the deletion of Sub-Section (iii) and for the insertion of a new Section and Regulations before Section XVIII "University Lectureships" on page 316 of the University Calendar for 1917. The proposed Regulations classified University Professorships into General and Special. Under the head 'University Professorships Special' there came (1) The Professorship of Indian Economics, (2) The Professorship of Indian History, and Archaeology and (3) The Professorship of Comparative Philology. These regulations re-

lated to the appointment of University Professors, the tenure of office, the conditions of service and their duties.

Mr. K. V. Rangaswamy Aiyangar asked if the engagements already made with the University Professors would be contravened by those regulations.

Mr. Hunter replied that they would not be contravened.

The various parts of the recommendation were put to the meeting separately.

Mr. Mark Hunter moved that regulation 96 (iii) be deleted and the remaining sub-sections be re-numbered.

Mr. C. P. Ramaswamy Aiyar seconded the motion which was put to the meeting and carried.

Mr. Mark Hunter then moved that the new Regulations relating to the University Professorships (General and Special) be inserted with appropriate numbers immediately preceding Section XVIII "University Lectureships."

Mr. K. R. Guruswami Aiyar seconded the motion.

The first Regulation under the head "University Professorships General" was "University Professors shall be appointed by the Senate with such remuneration as it may determine, on the recommendation of the Syndicate."

Mr. Govindaraghava Aiyar moved to add the words "to be made in consultation with the Board of Studies in the branches of knowledge in respect of which the University Professors are to be appointed." In doing so he said that in the Syndicate there were gentlemen who might be experts in some branches of knowledge, but it was not a necessary condition that in the Syndicate, an administrative body, there must be persons who were experts of knowledge in respect of which University Professors were to be appointed. Boards of Studies who were the expert bodies were in a much better position than a few experts there might be in the Syndicate to suggest the most eligible persons for the University Professorships. His amendment did not say that the Syndicate was bound to accept the recommendation of the Boards of Studies. The Senate should be assured that the Syndicate in making any recommendation had the advantage of consultation with the Boards of Studies. Mr. Mark Hunter laid particular stress on the value of the services of Boards of Studies in other directions. If so, their services and suggestions must be equally valuable with respect to the

determination of persons by whom such lectures or discourses were to be delivered.

Mr. K. Ramanuja Chari seconded the amendment.

Mr. Hunter said that there was some misapprehension in regard to the matter. The Syndicate never dreamt of appointing a University Professor without referring the matter to a body of experts. After advertising in Indian and English newspapers, the Syndicate appointed two Committees one in India and another in England to consider the applications and to make a selection. It was perfectly impossible for the Boards to make a selection of the candidates, for the candidates should be seen by the advisers of the Syndicate. On the report of the body of experts the best candidates were selected. There could not be any reasonable doubt as to the qualification of the candidate selected. The Syndicate did not make the selection itself, but was only responsible for the selection.

Khan Bahadur Azizuddin Sahab in opposing the amendment said that on the Senate and on the Syndicate they had a sufficient number of experts to come to a satisfactory decision and it was unnecessary to lay a hard-and-fast rule to consult the Boards of Studies. There would be no finality if they went on adding Body after Body to give advice to the Syndicate.

Mr. K. V. Rangaswamy Aiyangar in supporting the amendment said that before the Senate gave its sanction to the appointment of any Professor it should have the advantage of the opinion of constitutional authorities. Nobody wished to deprecate the appointment of small Committees to select people out of a number of candidates of whom opinion had already been expressed by the Boards of Studies. The amendment wanted that before the Syndicate came to the Senate, it should see that the opinion of the Boards of Studies had been taken. Such a provision was necessary and desirable. All possible precautions should be taken to secure the very best men. The Boards of Studies should be consulted at the beginning on the receipt of applications from candidates. The candidates should be men of standing in the world and should be men of general reputation.

Mr. Allen said that the use of the expression "in consultation with the Boards of Studies" would give the meaning that the Boards of Studies were to be a sort of co-ordinating body with the Syndicate in making the recommendations. The proper word would be 'after' and not 'in.'

Mr. Govindaraghava Aiyar said that expression as it was really conveyed the meaning. However, he was prepared to accept Mr. Allen's verbal amendment.

Mr. J. H. Stone in opposing the amendment said that if the amendment were carried, it would to a certain extent relieve the responsibility of the Syndicate. The Syndicate would take a narrower range of men than they ought to take. He also pointed out that the substitution of the word "after" for the word "in" was not a mere verbal alteration.

Mr. Govindaraghava Aiyar was not particular about the word "after" and would retain the word "in."

The amendment was put to the meeting and lost and the original proposition was carried.

The next recommendation of the Syndicate moved by Mr. Mark Hunter was also carried without opposition. It was this:—

The term of office of a University Professor shall ordinarily be for five years, but the same person may be re-appointed by the Senate on the like recommendation.

Mr. Mark Hunter then moved the following recommendation of the Syndicate:—

"Every appointment of a University Professor shall be subject to the following provisions, that is to say, the Senate may on the recommendation of the Syndicate dispense with the services of a University Professor at any time before the expiration of five years on payment to him of six months' salary, and it may on the like recommendation discharge him from service without notice or compensation in the event of neglect or refusal to perform his duties or of misconduct on his part or of a breach by him of any of the conditions on which he was engaged. The Syndicate shall have the power to accept from a University Professor the resignation of his office provided that he gives six months' notice of his intention to resign."

Mr. O. P. Ramaswamy Aiyar pointed out that the resolution as it was worded would mean that the Senate could dispense with the services of a University Professor only on the recommendation of the Syndicate. He wanted to have a ruling of the Vice-Chancellor on the matter.

Mr. A. Rangaswamy Aiyangar agreed with Mr. O. P. Ramaswamy Aiyar in that view and added that an inherent power could not be taken away from the Senate, the Syndicate took to it-

self any power by any rule by which the powers of the Senate were to be limited in dispensing with the services of a University Professor; that rule was 'ultra vires.'

Mr. Mark Hunter pointed out that no University Professor was appointed except "on the recommendation of the Syndicate."

Mr. G. A. Natesan said that even if the proposition was passed by a majority of votes, the Senate had power to dismiss a University Professor on the motion of a member of the Senate. The freedom of appointment given to the Syndicate was most unfortunate. If on the recommendation of the Syndicate the Senate appointed a gentleman as a University Professor and if the Senate later on found that the choice had been unhappy, it should have the inherent power to terminate his services. The Syndicate might be unwilling to make a proposal to dispense with the services of a University Professor and the members of the Senate might hold the opposite view and might have considerable amount of information that a certain Professor should be no longer continued. In that case a member of the Senate should have the right to move a resolution to dispense with the services of that Professor.

The Vice-Chancellor said that so far as he was at present advised that the Senate could not, except on recommendations of the Syndicate, dispense with the services of a University Professor.

Mr. F. E. Corley said that it was remarked on a former occasion by the Director of Public Instruction that there was an atmosphere of suspicion in the Senate towards the Syndicate, the executive body of the Senate, and that it was entirely undesirable and unworthy of the Senate.

In the same spirit he would like to deal with the Senate now. The University Professor should not be at the mercy of any member of the Senate. That would make the position of the University Professor uncomfortable. He should not be a target for any member of the Senate. The Senate should have confidence in the Syndicate. The Regulation was perfectly reasonable.

Mr. K. V. Rangaswamy Aiyangar said that the Senate was much obliged to Mr. Corley for trying to preach the pacific spirit. No Regulation should be passed limiting the scope of choice of the University. No Senator would bring a proposition for the removal of a University Professor without satisfying himself that

there was sufficient charge against him. The point taken up by Mr. Corley was purely nebulous. It was not the intention of any body to threaten any University Professor. They were all anxious to preserve their academic rights. The powers of the Senate should not be limited. In a covenant between an employer and an employee there should always be a provision for invaliding him under certain conditions. Where was the condition in the case of a University Professor? What were they going to do if a Professor neglected his duty, or was guilty of misconduct, etc.

The Hon'ble Mr. K. Srinivasa Aiyangar in supporting the proposition said that there will be absolutely no occasion for that Regulation being put into effect. If unhappily such an occasion arose there should be a preliminary enquiry by a small body of persons who might keep their deliberations absolutely confidential. The matter should not be discussed in a quasi public meeting like the Senate unless it reached a stage when a *prima facie* case had been made out.

Mr. K. B. Guruswamy Aiyar said that the resolution was unfortunately worded and would mean that only on the recommendation of the Syndicate the Senate may consider the question of dispensing with the services of a University Professor. In other words if the Syndicate considered the matter and came to the conclusion that a Professor should not be dismissed, the Senate would have no opportunity and no voice to dispense with his services. On the same materials the Syndicate might form one opinion and the Senate might form a different opinion. If instead of the words "on the recommendation of the Syndicate" they had the words "on the report of the Syndicate" they could accept the proposition.

Mr. Govindaraghava Aiyar suggested that the recommendation of the Syndicate might be remitted to a committee for further consideration. He sympathised with the view of the Hon'ble Mr. K. Srinivasa Aiyangar. There was also the view that every member of the Senate had a right to say that a person who was not desirable as a University Professor should be dismissed. Again there was the suggestion of Mr. K. V. Rangaswamy Aiyangar that there was no provision for a case where a University Professor might be invalidated. The resolution required modification to meet all the possibilities referred to. A small Committee, consisting of the Director of Public Instruction Mr. Mark Hunter, Mr. Natesan and Mr. O. P. Ramaswamy Aiyar might

be asked to revise the language of the resolution so as to meet all the possibilities suggested.

Mr. K. V. Rangaswamy Aiyangar seconded this proposal.

Mr. J. H. Stone said it would be better if the Senate referred the matter back to the Syndicate.

Mr. Natesan seconded this proposal which was put to the meeting and carried.

Other minor recommendations of the Syndicate connected with University Professorships (general) were carried unopposed.

UNIVERSITY PROFESSORSHIPS (SPECIAL).

Mr. Hunter moved the following recommendation of the Syndicate connected with the Professorship of Indian Economics:—

Without prejudice to the terms of Regulation 6, it shall be the duty of the Professor of Indian Economics—

(a) to enquire into actual economic conditions in the Madras Presidency and in the Native States within the territorial jurisdiction of the University;

(b) to enquire into the economic history of the same area;

(c) to stimulate interest in economic studies and to enlist the help of students in the above enquiries and to supervise their work.

Mr. B. Hanumantha Row seconded the resolution.

Rev. Macphail moved to omit the words "without prejudice. . . . and to supervise their work" and to substitute the words "The Chair of Indian Economics shall have special but not exclusive reference to the economics of Southern India."

He said that the amendment merely aimed at bringing the duties of Professors of Indian Economics into line with the duties of other Professors.

Mr. A. Rangaswamy Aiyangar seconded the amendment which was put to the meeting and carried.

The following resolutions were also carried:—

"The Chair of Indian History and Archaeology shall have special but no exclusive reference to the History and Archaeology of Southern India."

"The Chair of Comparative Philology shall have special but not exclusive reference to Sanskrit."

"Without prejudice to the terms of Regulation 6 it shall be the duty of the Professor of Comparative Philology, when so directed by the Senate or the Syndicate, to supervise the work of Assistant Lecturers and Readers in Indian languages."

ORDINARY UNIVERSITY LECTURES.

Mr. Mark Hunter moved to substitute the following for the existing Regulations 391, 392 and 393:—

1. With a view to assisting in giving instruction in the Honours Course and to making extended provision for post-graduate study and research, the Senate, on the recommendation of the Syndicate, may appoint persons other than those receiving salaries as University Professors, Lecturers or Readers to deliver courses of lectures in subjects included in the Honours Courses or in others not so included.

2. The Registrar shall request the Boards of Studies to submit to the Syndicate by the 30th November in each year such recommendations as they wish to make for courses of University lectures to be delivered during the following academic year by persons other than those receiving salaries as University Professors, Lecturers or Readers.

3. The Registrar shall request the Principals of Colleges affiliated in Honours to submit to the Syndicate for reference to the Boards of Studies concerned, by the 30th October each year, a list of the courses of lectures which members of the College staff are prepared to deliver as University lectures during the following academic year.

4. Consolidated lists of lectures to be delivered by persons other than those receiving salaries as University Professors, Lecturers or Readers shall be placed by the Syndicate before the Senate for sanction.

Mr. K. R. Guruswamy Aiyar seconded the motion.

Mr. Govindaraghava Aiyar moved to insert the words "made in consultation with the Boards of Studies concerned" between the words 'Syndicate', and "may appoint" in the fourth line of the first of these regulations and said that in framing a regulation they must see that it gave room to no abuses.

Mr. K. V. Rangaswamy Aiyangar seconded the amendment and said that the Boards of Studies must be consulted and there should be a precise and clear expression.

Mr. C. P. Ramaswamy Aiyar pointed out that the language of the recommendations of the Syndicate would mean that persons shall be appointed first and the arrangements would be made for course of lectures to be delivered next.

The Vice-Chancellor said that the particular propositions might be transposed.

Mr. Ramaswamy Aiyar said that if recommendation No. 3 was put first, there was no necessity for further discussion.

Mr. Mark Hunter agreed to put No. 3 first.

Mr. Govindaraghava Aiyar said that that arrangement was only second best. However he would withdraw his amendment and recommendations 1, 2, 3 and 4 were carried.

UNIVERSITY STUDENTSHIPS.

Regulation 404 says that no candidate shall be eligible for a studentship unless he has passed one of the five examinations (enumerated in the Regulation). Two of them are (a) the Science Branch of the B.A. Degree Examination under the old regulations and (b) the M. A. Degree examination under the old regulations.

Mr. Mark Hunter moved to omit (a) and (b) and re-number the paragraphs.

Mr. G. A. Natesan seconded the motion which was carried.

HONOURS DEGREE EXAMINATION.

Mr. Kuppuswamy Sastri moved to delete the existing time-table under Branch VI of the Honours Degree Examination found in Regulation 208 and to substitute the following words:—

"The time-tables for the examinations in languages will be identical with the time-table detailed in Regulation 196, under Group (VI), of the B.A. Degree Courses, with the word 'Composition' substituted in the place of the related subject or language detailed under 'Third Day, 2-5.' Candidates for Honours will each be required to answer the papers set for the B. A. Degree Examination in one of the languages selected for Honours, and to answer the papers in the remaining language on the first three days of the preceding week."

Mr. G. Venkataranga Row seconded the resolution which was carried.

B. A. DEGREE EXAMINATION.

Mr. Macphail moved to correct a mistake in the time-table for Urdu for second day.

Regulation 196 under Group VI. He said the word "Translation" should be substituted for the word "Composition."

Mr. Mark Hunter seconded the proposition which was carried.

On the motion of Mr. Mark Hunter, seconded by Khan Bahadur Azizuddin Sahab, the further discussion of the items on the agenda was adjourned to 4 p.m. on the following day.

The Senate resumed its sitting on Saturday, the 10th instant, at 4 p.m. About seventy Fellows were present. Sir P. S. Sivaswami Iyer, Vice-Chancellor, presided.

INTERMEDIATE EXAMINATION.

In accordance with the Report of the Committee of the Senate appointed at an extraordinary meeting held on July 22, 1916, to inquire into and report upon the causes of failure in the recent Intermediate Examination [1916] and to recommend to the Senate, if necessary, any measures to be adopted to obtain more satisfactory results, the Rev. A. Moffat moved that the Intermediate courses of study, more particularly that in English, be revised.

In doing so he said that the Committee after a deep enquiry had arrived at the conclusion that the present courses of study for the Intermediate Examination appeared to be rather heavy and that it would be in the interests of the students appearing for the examination to revise the courses of study, especially in English. The opinions of the Principals of the Colleges in the Presidency were invited and most of them had recommended some reduction in the number of text-books in English. Some of them said that there was too much of Poetry and others recommended reduction in the number of text-books in Prose. At all events there was a consensus of opinion that the courses of study especially English needed revision.

Mr. Statham seconded the motion.

Mr. K. Ramanujachariar moved an amendment to the effect that after the word 'revised' in the original motion the following be added:—

"And that a Committee consisting of the Rev. George Pittendrigh, Mr. Mark Hunter, Mr. O. J. Couldrey, Mr. P. T. Srinivasa Aiyangar, Mr. K. B. Ramanatha Aiyar, Mr. R. M. Statham, Rev. W. M. Zumbro, Rev. A. F. Gardiner, Rao Bahadur K. Ramanujachariar, Mr. G. A. Natesan, Rev. Moffat, Mr. Fyson, Mr. Littlehailes, Rev.

H. J. Quinn and Mr. C. P. Ramaswami Aiyar be appointed to consider the question of such revision and to bring forward definite proposals in this behalf at the next meeting of the Senate to be held in October 1917."

In doing so he said that the Committee to inquire into the causes of failure was appointed after a good deal of discussion. It was no doubt a very good and representative Committee. The Committee considered with an open mind the causes of such high percentage of failure. Indiscriminate admission in the Intermediate classes, heavy courses of study, neglect of Grammar, the nature of the questions set in English, quality of teaching and the general calibre of the students were among the many points that were considered by the Committee. The Syndicate held that the main cause of failure was the indiscriminate admission in the Intermediate classes. They had not taken into consideration the other causes of failure which were equally important. Rev. Zumbro had clearly shown the erroneous nature of the conclusions the Syndicate had drawn from the report. Mr. Ramanujachariar presented to the meeting statistics to show that the Colleges said to be good in point of admission were found to be bad in point of results. Mr. Littlehailes had also submitted a minute to the Syndicate in that connection. The speaker said that he had great respect for Mr. Littlehailes' ability and experience but he was bound to say that the minute was absolutely fruitless and wanting in constructiveness. He compared it to the opinion of an expert who after the examination of a horse said that, if it had not been blind of one eye, lame of one leg, devoid of its tail, etc., it would be considered a perfect animal. They all had known that the percentage of failure in the Intermediate Examination during the last three or four years had been rather very deplorable. It was very necessary therefore that the question of such revision ought to be carefully enquired into and definite proposals in this behalf should be submitted to the Senate at its next meeting by the Committee proposed.

Mr. K. V. Rangaswamy Iyengar in seconding the proposition suggested that the name of Mr. K. Ramanujachariar be added to the number of names proposed for the Committee.

Mr. Mark Hunter said that he was not prepared to serve on the Committee. Mr. Azizuddin Sahab Bahadur suggested that the name of Mr. Bazlullah Sahib be added to the list.

Rev. Quinn in opposing the amendment said that the proposals of the Committee would not

in any case be binding on the Board of Studies and the Board of Examiners and the Committee would therefore serve no useful purpose.

Mr. J. H. Allen said that Mr. Ramanujachariar had entered into a elaborate examination of the statistics with regard to the admission in the Intermediate classes and the high percentage of failure. The opinions of the Principals of Colleges were invited and these opinions were divided. They could not get any definite opinion on that matter. They did not really need a Committee to revise the course. Principals of Colleges wanted less number of text-books in English, especially in the non-detailed portion. They also wanted to avoid some technical questions in the Examination paper. Such a change might be conveniently brought about by the Board of Studies and the Board of Examiners as suggested by Rev. Quinn.

Mr. Mark Hunter said that he saw no necessity for a Committee. The choice of text-books was no doubt a very difficult one and the Board of Studies could not be said to be free from committing mistakes. He could only say that errors of the kind complained against would in future be avoided and that the Board would exercise greater care in the choice of text-books. The task of the Examiners was not also an easy one. For instance, in the present year, over 6,000 candidates had appeared for the Intermediate Examination and they had a large number of Examiners and Assistant Examiners. They were doing their very best to set the best questions on the portions taught and value the papers in the best manner possible. If the Syndicate should be displeased with the work of the Examiners they might very well find other set of Examiners who would be able to do better work. The Intermediate course was the foundation of higher University courses. If they were to pull down the foundation the consequences would inevitably be disastrous. The Committee could give no mandate to the Board of Studies, to the Board of Examiners or to the Senate. He was of opinion that the Committee was unnecessary.

Lt.-Col. Giffard said that the Medical Board discussed statistics in private. He saw no reason why the Senate should be troubled with the statistics which were in many cases misleading. The Committee proposed could come to no definite conclusions and he hoped that the Board of Studies and the Board of Examiners would be able to do something in the matter to minimise the difficulties complained against. He proposed that the Senate do proceed to the next item in the agenda.

Mr. Littlebailes seconded the amendment. The Hon'ble Mr. Stone said that he warmly supported the amendment of Col. Giffard and proceeded to speak on the original proposition.

Mr. F. E. Corley rose to a point of order and desired to know if members could speak on the original proposition when they had a motion before the House to proceed to the next business on the agenda.

The Vice-Chancellor allowed the Hon'ble Mr. Stone to proceed with his remarks. Mr. Stone continuing said that he agreed with the opinion of the Principal of the Nizam's College that there was too much poetry in the English course of the Intermediate Examination. There was however a diversity of opinion on the question of revision. The Committee proposed was not likely to do more than the Committee that had submitted the report to the Senate. As Rev. Quinn had pointed out very much depended on the Board of Studies and the Board of Examiners. Mr. Hunter was in a more conciliatory spirit on that occasion than he was accustomed to be and he had admitted the mistakes that had been made and assured the Senate that the Board of Studies would exercise better discretion in future in the choice of text-books.

Mr. A. Rangaswamy Iyengar wanted to know if the motion to proceed to the next business in the Agenda would take precedence over other questions before the House.

The Vice-Chancellor replied in the affirmative.

Mr. C. P. Ramaswamy Iyer in opposing the amendment of Col. Giffard said that to proceed to the next business in the Agenda without coming to any conclusion on the original proposition would be showing scant courtesy to the Committee whom they had brought into existence at a previous meeting of the Senate. Such a procedure would amount to trifling with the question before them and would not add dignity to the deliberations of the Senate.

Mr. G. A. Natesan said that if the Senate accepted the motion of Col. Giffard, it would only mean that they were belittling the opinion of the responsible Committee that had made those suggestions.

Rev. Macphail said that sufficient respectful attention had already been paid to the recommendations of the Committee.

Mr. K. V. Rangaswamy Aiyangar said that it would be bad business to ignore the suggestions of the Committee. The procedure, he was afraid, would set up a bad precedent.

Col. Giffard's motion was put to vote and lost, 24 voting for and 39 against it.

Mr. L. A. Goyindaraghava Iyer in supporting the amendment of Mr. K. Ramanujachariar said that it was the duty of such a body as the Senate to remove the causes of such a large percentage of failure of students appearing for the Intermediate examination. They had before them the statistics prepared by the Committee, Rev. Zumbro and the Registrar. A Committee as proposed by Mr. Ramanujachariar was quite necessary to find out the real causes of failure and suggest remedies to remove the evils.

Rev. Bertram said that he did not exactly know what was meant by revision. There was no unanimity of opinion among those that wanted the change. He thought that it would be quite enough if the Senate expressed their view on the subject. There would be no purpose served by the appointment of a Committee.

Mr. Conldrey said that there was no doubt a feeling that there were certain defects in the present mode of prescribing text books, the nature of admission in the College classes and conduct of examinations that needed immediate remedy. But he would suggest that the subject might be allowed to hang over for some time and the real defects might in the course of their work be found and remedies applied when the actual defects were found out. He was at the present time opposed to the formation of a Committee.

The Hon'ble Rev. Pittendrigh said that the Board of Studies was peculiarly a sympathetic body and they would take up the suggestions to lighten the course. He thought that there would be no good purpose served by the appointment of a Committee and therefore he did not want to serve on the Committee. He would suggest that the whole thing might be left to the good sense of the Board of Studies and Board of Examiners to modify and lighten the course as reasonably as they could.

The Hon'ble Mr. Stone moved that the matter might be referred to the Boards of Studies concerned.

The motion was duly seconded. Mr. K. Ramanujachariar then withdrew the amendment and the motion of the Hon'ble Mr. Stone was carried.

Before Lieut.-Col. Miller moved his proposition, the Hon'ble Mr. Stone explained the procedure followed by the School Final Board before it declared a student fit for the University course and said that the Board was exercising great care and discretion and the consideration of the

Presidency average, school marks, Public examination marks, etc., removed all chances of error in declaring a student's fitness for the University course.

SCHOOL FINAL CANDIDATES.

Lieut.-Col. Miller, on behalf of the majority of the Committee of the Senate appointed at an extraordinary meeting held on July 1916 to inquire into and report upon the causes of failure in the recent Intermediate Examination and to recommend to the Senate, if necessary, any measures to be adopted to obtain more satisfactory result, moved the following proposition:—That it be a recommendation to the Syndicate that candidates be allowed to be matriculated on the strength of Secondary School-Leaving Certificates on definite percentages of marks obtained in the Public examination.

He said that the public had no confidence in the Presidency average and the school marks were unreliable.

Mr. James seconded the proposition.

The Hon'ble Mr. Stone opposed the motion and said that Col. Miller had not taken into consideration the work of the School Final Board before it declared a student fit for the University course. The School Masters had shown their sense of responsibility in the matter of giving marks and had done their duty with great care and responsibility. The work of schools had greatly improved under the S. S. L. C. Scheme.

Mr. A. C. Pranatharhihara Iyer then moved the following amendment:—

That the words 'not exceeding the Presidency averages in the respective subjects,' be inserted after 'percentages' and before 'of,' in the proposition moved by Col. Miller.

In doing so he said that the new scheme had worked well and it would be retrograde step to go back to the old Matriculation. The lead given by Madras in matters relating to Secondary education had been taken up by other provinces in the country. The Committee had misunderstood the scope of the scheme and as a matter of fact the Department of Education was well satisfied with the working of the S. S. L. C. Scheme.

Mr. F. E. Corley rose to a point of order and said that the amendment had no bearing on the motion before the House. The Vice-Chancellor ruled the amendment out of order as it was vague and unintelligible and was not relevant to the motion.

Mr. K. Ramunni Menon moved that the Senate do proceed to the next business in the Agenda.

Mr. G. A. Natesan seconded the motion and it was carried.

UNIVERSITY READERS.

The report of the Committee appointed by the Senate to recommend arrangements to be made after the termination of the present readerships in August 1917 was then presented to the Senate.

The Committee did not recommend that the tenure of office of the present readers be extended from August 1917 and has no further recommendations to make.

The following propositions were then moved, duly seconded and unanimously carried in rapid succession :—

MADRAS COLLEGE FOR WOMEN.

That the Senate record its opinion that the application from the Director of Public Instruction, Madras, for the further affiliation of the Madras College for Women in Group (v)—History and Economics—of the B. A. Degree Courses may be granted by the Government.

THE PRESIDENCY COLLEGE AFFILIATION.

That the Senate record its opinion that the application from the Director of Public Instruction, Madras, for the further affiliation of the Presidency College in Sanskrit and a related subject and in Persian and Arabic under Group (vi) of the B. A. Degree Courses may be granted by the Government.

SALEM COLLEGE.

That the Senate record its opinion that the application from the Chairman, Municipal Council, Salem, for the further affiliation of the Salem College in Group iii (Sanskrit and Tamil) of the Intermediate Courses be granted by the Government.

UNIVERSITY LECTURES.

The Syndicate submitted to the Senate the following ordinary University lectures proposed for the academic year 1917-18, and the Rev. F. Bertram moved that sanction thereto be accorded under Regulation 393 :—

The Rev. C. Pruvot, S. J., The Theory of the Conduction of Heat, 3rd year, 20 lectures, July to September, 1917.

Mr. P. Lakshminarasu Nayadu, B.A., Theory of Vibrations, 2nd and 3rd years, 20 to 25 lectures, October to December, 1917.

Mr. N. S. Subba Rau, M.A., The distribution of wealth with special reference to recent

developments in theory and practice, 2nd and 3rd years, 20 lectures, October to December, 1917 and January to March, 1918.

Mr. C. V. Chandrasekharan, B.A., English Political Thought in the Nineteenth Century. All the years, 20 lectures, October to December, 1917.

Mr. D. J. Sloss, M.A., The History of English Literary Criticism in relation to external sources and parallels, 2nd and 3rd years, 20 lectures, September to December, 1917.

Mr. S. Kuppaswami Sastri, M.A., Theism of Hindu Philosophy. All the years, 20 lectures, August to December, 1917.

DR. P. C. RAY'S LECTURE.

That the Senate's sanction be accorded to make arrangements, with the approval of Government, for a course of six Special University lectures—three on the 'History of Hindu Chemistry' and three on the 'Nitrates of Mercury and Allied Metals'—to be delivered in Madras by Mr. P. C. Ray, D. Sc., C. I. E., of Calcutta, the cost of the lectures being defrayed from the annual recurring grant of Rs. 65,000 by the Government of India.

A SPECIAL UNIVERSITY LECTURE.

On the report of the Syndicate that, with the approval of Government, arrangements were made, in anticipation of the sanction of the Senate, for a Special University lecture on 'Geographical Factors in Indian History' to be delivered in Madras by Professor L. F. Rushbrook Williams, University Professor of Modern Indian History, University of Allahbad on February 21, 1917, the cost of the lecture being defrayed from the annual recurring grant by the Government of Rs. 65,000, Mr. Mark Hunter moved that the action of the Syndicate be confirmed.

The motion was carried.

TWO LECTURES ABANDONED.

The Syndicate report, with reference to the resolution of the Senate passed on July 22, 1916, that the Board of Studies in Mathematics reported that the Hon'ble Mr. R. P. Paranjpye was unable to arrange to deliver a course of special lectures in this University; also that the conditions under which Dr. J. C. Bose of Calcutta was prepared to lecture in Madras were prohibitive; accordingly the Syndicate expressed its regret that it has been unable to arrange for courses of Special University lectures by these gentlemen.

MEDICAL DEGREES.

A vast number of alterations in, and additions to, the Regulations for the M. B. and B. S. and L. M. and S. were then moved by Lt.-Col. Miller and accepted by the Senate.

L. T. EXAMINATION.

On behalf of Dr. G. Slater, Mr. Hunter moved the following proposition :—

That it be referred to the Boards of Studies in English and Teaching to consider what alterations, if any, in the L. T. Examination are advisable in order to give candidates an opportunity of showing special competence to teach English.

Mr. L. A. Govindaraghava Iyer seconded the proposition.

Mr. H. S. Duncan and K. V. Rangaswamy Iyengar opposed the motion.

The proposition was carried, 26 voting for and 13 against it.

MOTIONS AND AMENDMENTS.

Mr. C. P. Ramaswamy Iyer then moved the following proposition for the introduction of motions and amendments without previous notice into the Senate meeting :—

(1) That the following be added to Regulation 22 at the end thereof :—

(x) A motion dealing with any matter the consideration of which, in the opinion of the Chairman, has been rendered necessary by, and is consequential upon, any resolution passed by the Senate at the same meeting.

(2) That in Regulation 40 after the paragraph numbered (i) be inserted the following :—

(ii) Amendments to any resolution or amendment on the Agenda paper of a meeting which in the opinion of the Chairman, have been rendered necessary by, and are consequential upon, any resolution passed by the Senate at the same meeting, and that the remaining paragraphs be renumbered.

Mr. K. V. Rangaswamy Iyengar seconded the motion.

Mr. Littlehales said that the proposition was very wide and was not definite in its scope and application.

The Vice-Chancellor remarked that he doubted very much the necessity for the first portion of the proposition. The second seemed to be necessary. With regard to the first the scope was much wider than necessary and the expediency of the first portion of the proposition was doubtful.

Mr. Hunter said that a Committee was enquiring into the matter to find out the best ways and means by which the Regulations might be revised.

Mr. Justice Oldfield also said that the question was before the Committee and hoped that necessary steps as suggested in the proposition would be taken to meet urgent cases.

The proposition was withdrawn.

OLD F. A. CANDIDATES.

The second part of the Regulation 419 says :—
A student who has qualified for the four term certificates required to be produced by candidates for the First Examination in Arts under the existing by-laws and regulations, shall be allowed to appear for the Intermediate Examination under the new regulations on the production of a certificate or certificates of having attended an additional year in an affiliated college.

Mr. K. B. Ramanathan moved :—

That the following words be added at the end of the second para. Of Regulation 419, after the words 'affiliated college': 'provided he offers for the examination the following optional groups :—i (a) Mathematics, (b) Physics, (c) Chemistry or ii (a) Natural Science, (b) Physics, (c) Chemistry. In case he offers any three of the subjects of the iii Group, the production of a certificate or certificates of having attended an additional year shall not be required.'

The motion was duly seconded and carried.

RIGHTS OF ORDINARY FELLOWS.

Mr. K. V. Rangaswamy Iyengar then moved the following proposition :—

'An ordinary Fellow shall have the right of access to the proceedings of the Senate, the Syndicate, any Faculty and any Board of Studies, and to any papers connected with such proceedings, except such as the Vice-Chancellor may declare to be confidential. And the Registrar

shall), on application previously made for the purpose of fixing a convenient hour, arrange for such access.

In doing so he said that most of the Fellows had no chance of getting details of the proceedings of the Syndicate, any Faculty and any Board of Studies. That created an invidious distinction. If the Senate would accept the proposition such distinctions would be removed, business facilities would be increased and discussions would be shortened.

Mr. K. B. Ramanathan seconded the motion.

Rev. Macphail opposed the motion and said that there was no desire on the part of the Syndicate to avoid giving any information to Fellows. The Presidents of the several Boards of Studies would not be in a position to submit all their papers everytime any Fellow wanted them. It would cause great confusion in the smooth working of the several Boards of Studies.

Mr. C. P. Ramaswamy Iyer said that there were some impediments in the way of getting information from the Registrar on some points. Some safeguards might be introduced and all Fellows should have ready access to the proceedings of the Syndicate, etc. He then moved for the appointment of a Committee to enquire into the matter and submit proposals for the consideration of the Senate. The Committee was to consist of the Hon'ble Mr. J. H. Stone, Mr. K. V. Rangasamy Iyengar, Rev. Macphail, Mr. L. A. Govindaraghava Iyer and Mr. Mark Hunter.

Mr. Ramaswamy Iyer's motion was carried, 23 voting for and 17 against it.

It was nearing 8 p.m. There was one more resolution to be dealt with. Fellows were anxious to get out. Mr. B. G. Grieve moved at this stage that the meeting be dissolved. Mr. Dedwell seconded the motion. Mr. Justice Oldfield objected to the dissolution of the meeting and said that it was hardly worth while to spend Rs. 2,000 for the sake of one resolution.

Mr. J. H. Stone said that the subjects not disposed off at that meeting could be brought up for consideration at the next meeting of the Senate.

Mr. Grieve's motion was carried. The meeting then terminated.—*The Hindu*.

INDIAN LEGISLATIVE COUNCIL.

PRIMARY EDUCATION.

MR. SARMA'S RESOLUTION.

Mr. B. N. Sarma (Madras) moved the following resolution:—This Council recommends to the Governor General in Council that the Government of India should recognize (a) that the Imperial revenues should accept the burden of the future extensions of primary education, (b) that a scheme whereby it may be made universal, compulsory and free throughout British India within a period of 15 years may be drawn up and sanctioned at an early date and introduced as soon as possible after the termination of the war.

After quoting from official speeches and documents Mr. Sarma said that they showed that there was absolutely no difference between him and those that thought with him and the Government. They also showed how essential it was to give every boy and girl the highest education they were capable of receiving if it was really desired that India should escape from the economic death grip that would strangle her beyond recovery. Referring to the first part of the resolution he said that he asked for it because the task which had been laid on Local Boards and Municipalities in the past had not been, could not be and would never be discharged satisfactorily with the limited resources at their disposal, because there was no prospect of any reasonable expansion of their resources commensurate with their undertakings. The Provincial Governments had not shown by their past conduct either willingness or ability to adopt a definite policy except perhaps one of helpless indifference. The Government of India themselves had felt the necessity of assisting the Boards or undertaking in effect a portion of the task without actually committing themselves to such a policy. After discussing the present position of education and finance Mr. Sarma said that there was no alternative left to them but to ask the Imperial Government to undertake the burden, a burden which, considering the surplus they were enjoying before the war, they could well bear. But the source of finance was immaterial, so long as adequate money was guaranteed. Proceeding to the second part of the resolution he showed

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by an analysis of the statistics of the population and education that the present progress was not substantial. Though more schools had been opened during the last five years there had been also a lot of wastage in that many did not pass through the initial stages. Thus the present voluntary system had failed. Mr. Sarma then referred to the various stages of progress which the different provinces reached and said that in 15 years these differences could be levelled up when they would be prepared for uniform development. He also alluded to the difficulties that stood in the way and suggested in conclusion that local bodies and Municipalities which were willing to raise the requisite funds without such assistance as the Government might afford, for making elementary education free and compulsory should be permitted to do so. The principle of compulsion should be enforced where conditions were favourable. Persons who were unable to pay a fee should be allowed to obtain the benefit of free education and free education should be steadily kept in view and should be the goal in the near future. A scheme of gradual expansion with the necessary financial provision should be prepared at an early date and given effect to as early as possible.

SIR SANKARAN NAIR

in opposing the resolution said that as the mover had not pressed the first part of the resolution he would confine himself to the second part. At the outset he might say that he subscribed to all the noble sentiments referred to by Mr. Sarma in his speech. Continuing he said that Mr. Gokhale's Bill was for a limited purpose only and was hedged round by all sorts of conditions, yet it was rejected. Mr. Sarma, who might have been expected to refer to these, had not said a word. The limitations found necessary then were considered unnecessary now. Sir Harcourt Butler in opposing Mr. Gokhale's Bill had referred to many objections and one of them was that there was no pronounced popular demand for free compulsory education and this held good even now. It was true that a few Municipalities and District Boards had expressed their liking. But that was not all. It was pointed out that the Congress and the Moslem League had demanded it, but it was not from these bodies that any opposition was expected. Sir Harcourt Butler had objected to the

Bill on the ground that the voluntary system had not been fully tried. Even then there were not enough funds to meet the demand. If the conditions were bad then they were far worse now. The further question of the improvement of teachers which was insistent then had not lost its force now. Primary education as now imparted was not appreciated and justly too. It was evident from the fact that there was a great paucity of scholars in primary schools. Again, Mr. Sarma had not outlined any scheme or machinery whereby they could compel boys and girls to attend schools. What he (Sir Sankaran Nair) would like to have from the Hon. members who wished to support Mr. Sarma was to show in what way the objections which seemed so potent 5 years ago had lost their force and if possible to outline a scheme on the strength of which they could ask for a reversal of the policy of the Government.

Mr. Nawabali Choudhri (Bengal) said that though he fully sympathised with the mover's desire to see primary education in India widely extended the solution as suggested in the resolution did not meet with his approval. It was premature on the present occasion to commit the country to any definite line of action. Nobody could positively say when the war would end and what would be the financial position of the Government then. Fifteen years was by no means a short period. He hoped that favourable circumstances would be present after the war. He did not mean to underrate the importance of free and compulsory education, but he did not think that the method suggested was of any practical value. He thought that without any very great fuss they might prepare the ground for free and compulsory education. He enumerated the lines of action on which Provincial Governments might proceed to remove the existing discouraging elements in the way of education. A better course would be to pull on as best as they could by putting the resources which they could conveniently command from time to time to the best use and remedying the existing drawbacks which hampered natural progress.

Sir Verney Lovett (U. P.) discussed the administrative difficulties which would attend the introduction of compulsory education in his province. He asked by what methods compulsion would be introduced

and what classes would be governed by the Act. He said that Mr. Gokhale's idea was that a Committee of the Municipal Board should see that the children attended the school; but he feared that no attendance committee could do this and the duty would probably fall on the small officials of the Board, a system which would not work. If the children did not attend, their parents would be fined and he greatly feared that oppression would follow. He said that they must consider the ideals of the people and he did not think that they ought to expel those ideals by force. He considered that the present system of primary education might be improved, developed and modified and made so elastic that parents would welcome it, and they might anticipate a great extension of primary education without introducing compulsion.

Mr. Sukul (C. P.) in supporting the resolution said that the rural conditions had to be improved first. He thought that India was no longer an isolated country and urged the motion for the consideration of the Council.

Mr. Sapru (U. P.) said that the objections which had been raised by Sir Sankaran Nair had been very disappointing. It was true that the Government had issued a resolution on the subject, but the public had not been taken into confidence. The main objection to Mr. Sarma's resolution was that he went farther than Mr. Gokhale in that he put it in very unqualified terms. But it should be remembered that the uneducated populace could not move in this matter. It was the duty of the Government and their educated countrymen to take the first step. Much was said against resorting to compulsion, but he submitted that this principle was not fought shy in other matters. The people were compulsorily vaccinated. Were there riots as a consequence of this? Then again in the United Provinces they had a system of compulsory labour and some of the supporters of that system were in the ranks of Government officials. Again the history of nearly all civilized countries proved that free and compulsory education was the only method of solving the problem. It was said that there was no suitable agency to give effect to compulsion. But he thought that with the new Boards they had in the United Provinces it would not be difficult to find

good machinery. It was asked by Sir Verney Lovett whether the present system had failed. If it had not failed in all other respects it had failed in one very important respect,—it had not at all satisfied public opinion. Referring to the activities made in the United Provinces during the past 15 years Dr. Sapru said that they had been wholly ineffectual. When they remembered the extremely slow progress of education they (the non-official members) had only one alternative and that was that they should have a free and compulsory educational system.

Mr. Sastri (Madras) said that Sir Sankaran Nair had not made any constructive proposals. His speech was entirely destructive which was supposed to be the special prerogative of non-official members. When Mr. Gokhale brought forward his Bill before the Government of India, the Member for Education announced that the Government were entirely in favour of universal education but that the best procedure to adopt would be to ask the local Governments to empower local bodies to make education free and compulsory. The idea was taken up, but the Local Governments in their turn said that it was a matter for the Government of India. Therefore they had come again to the Government of India. The Department of Education, as Mr. Gokhale used to emphasize, was formed in order to mark the importance which the Government desired to attach to education. What had this department of education done so far? The idea of forming attendance committees had been criticized. As such committees had not been formed nobody could be sure how they would work. Mr. Sastri then referred to the committee appointed in Bombay to consider the position of local bodies and said that the committee had unanimously recommended that local bodies should be entrusted with greater powers. If attendance committees did not work they might be done away with, but it was unfair to criticize them in advance. In conclusion he said:—'Let us go forward if everybody is in favour of compulsion. It is precisely because the people are backward that compulsion is most needed at the present time.'

Mr. Jinnah (Bombay) was in entire agreement with the spirit of the resolution. He thought that there could be no non-official member with any

other spirit. He hoped that the views expressed by Sir Verney Lovett were not the views of the Government of India and alluded at length to the administrative difficulties advanced by him. The speaker wanted to know whether Sir Verney Lovett would explain when the time would come when compulsion could be introduced without pressure. The argument was out of place in the twentieth century. It was evading the point at issue to say that they must persuade everybody to enjoy the benefits of education before using compulsion. Referring to Sir Sankaran Nair's speech Mr. Jinnah asked, What had the Government done to alter the conditions since Mr. Gokhale introduced his Bill in this Council?

Mr. B. N. Basu (Bengal) wanted to know how far the Government succeeded in extending elementary education during the past five years and argued that no appreciable advance had been made. He alluded to the conditions in Japan and Austria-Hungary where the voluntary system failed and compulsion was adopted and after dealing with compulsion in Germany, France and conservative England he urged that some compulsion was needed in India.

Rai Sita Nath Roy (Bengal) said that education should be the primary consideration of Government, but he doubted whether under the present circumstances the resolution could be given effect to. He hoped that better conditions would soon arise to enable the Government to extend the policy embodied in the resolution.

Mr. Shafi criticised the speech of Sir Sankaran Nair and said that his attitude towards the resolution was regrettable. Nothing had been done since Mr. Gokhale had introduced his Bill and the result was that the progress of elementary education was very slow.

PANDIT MADAN MOHAN MALAVIYA said that there was no subject of greater importance for the welfare of India than education and there was no country where this need was more pronounced and where unhappily less had been achieved than India. From 1854 when any tangible policy regarding education reform was announced there had been many pronouncements and investigations culminating in the attempts of Mr. Gokhale to introduce his Elementary Education Bill. The

debate which followed that attempt was hopeful inasmuch as it showed that the Government were prepared to vigorously combat ignorance and dispel it, but there had not been that measure of progress which the Council was led to expect. What then was it that obstructed progress? It was that the Government had not realized the importance, the magnitude, of the work. If only they came to see the problem in its true proportions then the present question of funds would vanish from their view. They were now in the midst of a war, but that war had for its basis an economic warfare. It was hence absolutely necessary that the people should be made more efficient mentally to protect themselves whenever that warfare should open up. When he advocated this measure he had the whole experience of the civilized countries to support him. One great lesson for example that Russia learned from the Russo-Japanese War was that the question of educational expansion stood on an equal footing with the questions of the development of man power or of manufacturing munitions. Russia, as he said before, discovered the importance of primary education after the war. It was then that she realized, as she had not done up till then, that the disasters in the war were due to the intellectual inefficiency of her people. Having learnt it she had set about framing a vigorous programme with the result that the expenditure on education had doubled between 1907 and 1912 and it was also expected then that by 1922 education would be universal. Now they found the same thing in India. In matters of economic competition day after day Indians were steadily going to wall. Japan produced cheaper and more fanciful things than the Indian workmen could. Nor was this surprising seeing the progress in education made by Japan. All the same there was the result that she was taking possession of their market. To neutralize it was essential that the Government of India should set about educating the people of India and equip them fully for the task of competition. He submitted in all humility that the conviction of this necessity had not yet dawned upon the Government and he was sure that when once they were really convinced they would make it a point of getting money for educational needs as surely as they did in the case of defence works. A successful

solution of the problem would also mean supplying remedies for some evils found in India such as the great number of deaths. Referring to Sir Verney Lovett's speech he said that he (Sir Verney) had exaggerated the administrative difficulties. He could assure the Government there would not be even a single riot for the simple reason that compulsion was not to be introduced to-day or the next day. The resolution merely gave expression to a sentiment that was in the minds of non-officials and did not mean that the law should be passed in terms of the resolution. Of course when the time came for legislation there would be enough safeguards, limitations, and exemptions. Again the law would be administered only after Local Governments had given their mature consideration and considered it in all its aspects. Referring to the attitude of the masses he would say that there was a great desire on their part for educating their children.

At this stage the Vice-President called time and asked the speaker to conclude.

Pandit Malaviya suggested that considering the importance of the subject the debate should be postponed till the next day.

The Vice-President said: I am not going to apply the closure.

Continuing Pandit Malaviya said that the courses of education, if they should be attractive, should be made more popular. He was not going to answer Sir Sankaran Nair's objections, but he would ask him to follow the course adopted by civilized nations. It was said that Mr. Gokhale had brought a more qualified measure, but he thought that considering the progress made meanwhile, had Mr. Gokhale lived he would have asked for more than he did then. Pandit Malaviya then proposed an amendment to the effect that the question be referred to a committee to go into the problem and report next cold weather.

Khan Zulfkar Ali Khan (Punjab) spoke from the Punjab point of view and advocated the acceptance of the modified principles for adoption in urban areas. He urged for rule-making powers for Local Governments. He opposed the extension of the system of free and compulsory education to girls' schools.

Mr. Ayangar (Madras) supported the resolution and pointed out that he was not particular whether the Imperial or Provincial Governments bore the burden. He argued that primary education should not be extended at the cost of higher education.

Mr. Haque (Bihar) expressed great pleasure that Mr. Shafi had changed his opinion on the subject. He assured the Government that the entire Mahomedan community fully supported free and compulsory education.

Sir John Donald explained the troubles which attended the introduction of compulsion in the North-Western Frontier Provinces and he briefly said that he believed that primary education would work out its own salvation without the aid of compulsion.

THE HON. MR. SHARP

said that Mr. Sastri had charged the Education Department with having done very little and had said that Sir Sankaran Nair had played the role of a destructive critic. He could assure the Hon. member that Sir Sankaran Nair was not blind to the needs. On the other hand he was spending much time in trying to grapple with this problem. If, however, no visible results were available it was because details had to be worked out by Local Governments. The Government of India could but outline the broad policy and this they had done. They had moreover called upon Local Governments to prepare schemes. As a result during the 3 years prior to the war an yearly addition of 300,000 pupils was made in primary classes. Mr. Sharp contended that at that rate Mr. Gokhale's ideal, which was less ambitious than Mr. Sarma's, would be reached in 23 years. He would not touch the genial principles underlying the resolution save to express his sympathy if that would count for anything, but the resolution wanted a special scheme. They had many such schemes shelved in the department and it would not be good to have this one also outlined only to be shelved.

Mr. Sarma replied at some length and emphasized the inherent weakness of the voluntary system. He urged that the Government should accept either his resolution or Pandit Malaviya's amendment as a post-war reform. The second part of the resolution was put and negatived by 21 voting for and 34 voting against it.—*The Leader*.

EDUCATION IN AMERICA.

PRINCIPAL FRITZ KUNZ'S LECTURE.

Let us begin by selecting a baby who is born into a town of about twenty or thirty thousand inhabitants in a middle Western State, and let us suppose this baby to be a boy. The sex matters very little indeed, because the law and the force of public opinion compel parents to treat the girls with the same generosity as to education as they do boys; and education in State and City schools is mixed or co-educational from the beginning all the way through Secondary or High Schools and even, for the most part, through College and University.

PRIMARY.

He is born, then our specimen boy, in his specimen small town. Now it does not matter in the least who his parents may be, so far as the State is concerned. His father may be a common labourer, like a brick-layer or stone-mason or grave-digger or he may be a tradesman or a doctor, or he may be a Municipal Councillor or the Mayor of the town—he is compelled to go to school and he is asked to pay no fees. Of course much difference would be found in the families enumerated in respect to environment. But here again the difference would be one of degree and not so much of kind. Our specimen boy is the son of an apothecary. When he is about three years old he is given, from time to time, boys to play with. Now note how education is rooted in the lives of the American people. The very toys stimulate the infant mind. They will be a miniature motor car, a working model of an engine or a whole railway train, or a whole train system, with railway lines, stations, semaphore signals and the like. There will be blocks of wood houses or sandstone, out of which the most splendid churches are built; and also, alas! for tresses and dungeon keeps, when the boy gets older. Some of the blocks will be coloured, and some will have big letters and numbers on the

sides. The boy's mother is a woman (who has had, like 90 % of American mothers, a sound elementary and secondary education up to Matriculation level, and who may very easily be a Bachelor of Arts) will be constantly conversing with the youngster about his toys, their colours, the names of the letters, the shapes of the blocks and a thousand and one things fitted for his three years old brain. When the boy is four he has a great experience. A circus comes to the town. The family goes. They see all sorts of wonderful things—giraffes, monkeys, zebras, elephants, camels and a hundred other creatures. They see human beings who can ride on splendid dappled horses while standing up. They hear bands and see clowns. And our little boy's mind is wonderfully enlarged. Afterwards his father brings home a book with coloured pictures of the things that he saw, and he picks out the names of these things, and almost before his own parents know it, and quite without any effort on his own part, the boy has learned to read famously—but not until he has for months been talking most freely about all sorts of things. He is a living battery of questions. His mind had been enlarged with wonder and enquiry, the hunger of the mind, is his pursuit in life. His games and his toys and his whole life tend to make his mind and his body alike dexterous.

When he is about six he goes to the school in his ward. His parents are anxious to send him. If they were not the truant officers would inquire into the cause for his non-attendance; but long before this necessity arises the boy sent into the school. He finds himself in a large airy room with about forty other boys and girls. They are all between five and six and a half years old. The teacher is a woman, and she is likely to be most kindly; in any case corporal punishment is mostly forbidden by law or the even greater force of public opinion.

Our boy is given a seat. It is a comfortable polished hard wood, individual seat with a back

shaped to fit his little spine; the desk is an individual locker desk; and the whole arrangement is sanitary and comfortable. Now the boy is not suddenly plunged into the mazes of spelling and arithmetic and book learning. His life here is only an extension of what has been going on at home. The idea is to play all the possible educative game. Stories are told and then the children act the story or model a scene from it in clay. They print the names of the characters by laying coloured sticks down. They play entrancing games with coloured shells and balls and learn to count and add. The whole school room is beautiful and airy and clean and light. There are *Picture on the Walls* a bird or two in a cage, plants growing in pots and boxes on the window ledges.

There are games in which the whole class takes part and pleasant drills and marches to music. Thus a sense of co-operation and social life is aroused. The school stands in a garden, and the most interesting things are found in the garden. Swings and see-saws and piles of sand to play in; a big open space for the finest and most exciting of running games with accompaniments of the freest shouting, and even screaming, that goes unrebuked.

On this principle our body is led into learning. He would be a curious child indeed who did not find pleasure in schools like these.

The school year runs mostly from September to June. Then our boy is advanced to the second standard. There his life is just as it was before, except that the proportion of book-work is slightly increased. And thus he goes on for four years and comes to the end of his primary education.

ELEMENTARY.

What is here called a standard is called in America a grade. Our boy now enters the fourth grade. His body has been allowed to develop by play, his mind has not been stunted by forced book learning. Physical skill and dexterity have

kept pace with intellectual unfoldment. Perhaps the intellectual phase has lagged behind. It is quite possible that he may be shaky and doubtful in his spelling and his arithmetic but he is sure to be able to play base ball and basket ball in a most superior manner.

His steadily enlarging curriculum has brought him an ever enlarging outlook. His home pursuits have kept pace, and his toys now run into such things as a small electric motor, if he be mechanically inclined, or a camera, with which he will take and make his own pictures, or water-colours, or the life. His teacher is in fairly close touch with his home life, and keeps his parents informed as to what the boy does at school.

When he comes into the seventh or eighth grade his education begins to be coloured with a larger percentage of secondary subjects, but the practical and manual arts are not forgotten. He may take his second language, but does also mechanical and design drawing and his wood working in the manual training class. He is doing algebra, but he is also having regular hours of gymnasium games. He is studying his national history from a book, and he is also taking part in a huge, annual tableau showing the history of the city in which he lives at the time the frontiersmen took the site from the aboriginal Indians. He learns more by acting the part of a wild, painted whooping Indian, than by reading about the Indian.

His education is saturated with patriotism, with the instinct to prize freedom, and to know his own value.

HIGH SCHOOL.

In this way he finishes his second four years in the elementary school, where, with other boys and girls, under the guidance of our truly wonderful women teachers for the most part, he completes the time of attendance required of him by law. At this stage the poorer boys drop out

to assist their parents by going to work, but the girls, less frequently needed as wage earners, go off. So that in High Schools, out of a hundred pupils, sixty will be girls and forty boys, on the average. Many boys, however, go to Night High School.

Here, at the age of fourteen, full-fledged secondary education begins, and both men and women teachers are in charge. The curriculum is greatly enlarged, and except for a few subjects (such as English) which are compulsory, the student selects his own subjects. The High School offers him, still quite free of cost, scientific and technical courses, manual art classics, home economics, and scores of other lines into which he may betake himself. Each State has scores or hundreds of High Schools at which free education is imparted in classical, technical, trade, agricultural and domestic economy courses. The total number of known High Schools in 1912 was 13,000 or about 250 to each State.

The course is usually a four year course, and if the student intends to go to the College or University he arranges his studies, under the advice of his teachers, with this future in view. But if his education is to end with High School he does not prepare those subjects which are merely preliminary, to College. The High School can teach him book-keeping and short-hand and typewriting; it can make him a skilled mechanic or woodworker; it can give him courses in businesses and economics; it can teach him scientific gardening and intensive farming; it offers him instruction in many practical lines, just as it gives the girls training in domestic science and home economics, in sewing, in art, and along various special lines. Thus, even if the lad leaves school at the end of the High School period he is quite ready to enter some occupation partially fitted for that occupation.

I do not want you to think that this knowledge is merely theoretical. If a boy wants to learn journalism and printing in High School he is

attached to the staff of the High School weekly, which is edited, illustrated, composed in type, put on to the presses, printed off, bound and distributed by the students themselves. If he wants to learn business he is on the business staff of the paper or he keeps the accounts of one of the numerous societies in the school. If a girl wants to learn cookery she assists (when she has had a little training) at the preparation of real luncheons and the like.

If your young man intends to go to College he carries on work in secondary subjects, works up his classics or read his history. He joins a debating society which debates living public questions. He does not care whether the pen is mightier than the sword; he does not waste his time debating whether women are inferior to men in intellect. He meets the debating teams of other schools to thresh out matters of municipal and public moment like Government ownership of trams and railways, the imposition of preferential tariff and the like. He visits City and State institutions and comes to understand his duty as a responsible member of the community. If he intends to be an engineer student at College he specializes in mathematics and mechanical drawing and related subjects; and he visits the City Gas Work, the Electric Power Station, the Pumping Station and the like; if a lawyer he visits the Courts, conducts mock trials, etc.

In short, his life at this stage is immensely practical and real commonsense. At the same time with his studies and experiments he carries on regular activities on the school gymnasium or on its games ground. The Principal of his school keeps in close touch with his parents and co-operates with them for the welfare of the boy. Regular arrangements are made for his physical examination and measurement, so that his growth and maturing shall be understood.

You can imagine what a marvellous corporate and intellectual unity a school is which has

within it six or eight hundred boys and girls all between the ages of fourteen and eighteen, all divided up into four classes each one year in advance of the other. Each morning the whole school assembles in the central hall. These halls are provided with individual locker desks and seats and for that year the individual keeps that same place. When the whole school is thus assembled there is usually an address, by public men and women when possible. When the various classes pass out to their class rooms, a few remain behind in the study hall if they have no work during the first period. At the end of the session the school is again assembled and then dismissed. There are organised games, and organised inter class activities; and the whole school is a constant scene of ordered, happy animation.

After this the young men and women enter Colleges and Universities. You must bear in mind that each of these States of the American Union has about 250 such High Schools. Then you are not surprised to know that each State also maintained not one but many Colleges and Universities. Thus in Illinois alone in the year 1912 there were 33 Colleges and Universities, 24 of them admitting both men and women. There were 596 such places of learning in all the States, which makes, according to the census of that year one College or University for each 170,000 of the inhabitants. We know only too well, alas that there is not one college in Ceylon for three or four millions of people.

There is a common and easy fling made at America that her degrees are cheap. The charge is as baseless as most generalisations are if it is meant that our *higher education is faulty*. But it is absolutely true, and we admit it with pleasure, if it is meant to convey the fact that secondary and higher education in America are within the reach of the poorest. There are few countries in this world where superior education is within reach of so many penniless young men of ability.

THE COLLEGE.

This field of the Colleges is much more largely in the hands of private corporations than any others. The gifts to Colleges and Universities in 1912 was 24½ millions of dollars, exclusive of all Government grants. The income from sources and fees was 56 millions. There were 230,000 men and women in the Universities. Here education is not free, but it is also not very costly. The average annual fee for each individual for tuition alone is about Rs. 150, but there is considerable variation.

The significant thing about the higher educational system in America is the wide variation in the degrees granted. In addition to such well-known degrees as Bachelor of Arts or of Science, there are the following: Bachelor of Agriculture, of Architecture, of Chemistry, of Civil Engineering, of Education, of Music, and very many others. There are higher degrees in all these and other lines. Obviously this adds very greatly to the dignity and to the extension of various professions. It is in keeping with the American doctrine, that no true labour lags dignity; it is not a man's business which degrades him, but himself.

University education is, generally speaking, of the same kind as is found in other advanced countries. The purpose in the life of the college man or woman is not so much to study as to learn how to study. It is true that for the bachelor's degree we require four years where the Englishman gives three. And for the master's degree we require an extra year of real work and a thesis, where he requires nothing except the lapse of years or that and a thesis. But the mode of carrying on is the same in principle.

The country boy has all of these advantages as well as the city boy, except that for the first four or five years his attendance at the rural school may be less regular because of the winter

snows, and except that the rural school is usually not so well equipped. But these disadvantages are offset by the healthy and open-air life that he leads and by the fact that he receives better attention in the smaller school. In these days of motors, cars and inter-urban electric cars it is the exceptional father who cannot send his children to a city school when they have grown to an age that is suitable.

TEACHING OF HISTORY.

It is not enough that children should learn to "know history;" they have to develop the power of historical vision, the sense of time-perspective. Leaving aside for a moment the application of the historical sense to other subjects than that technically described as history, we may note the change that is gradually taking place in our view of history as a formal school subject. Most of us can remember a time when a memorized list of the kings and queens of England, with their dates, was a negotiable asset that could readily be turned into marks. Then came the delightful declaration of some more modern history teacher that dates, comparatively speaking didn't matter. By degrees the idea penetrated our consciousness that merit was to be acquired not merely by knowing what things happened, and for how long, and in what order, but through realizing how and why they happened. Then, perhaps, we had the unusual good fortune to be drafted into the class of a teacher who made some attempt to deal with world history, or at any rate to present historical detail as part of an infinite series, and as related to an endless network of other contemporary detail. Our historical horizon broadened; history became, for the first time, a thing of infinite interest.

Even then interest, though infinite in potential range, was of the academic kind. Biographical detail would waken, now and then, a gleam of personal enthusiasm, but our sense

of historical perspective was largely diagrammatic. Dynasties, wars and acquisitions of territory, developing systems of law and government, became interesting because they were more than isolated parcels of event, and were linked up as parts of a general scheme of fact and causation; but there was a certain bloodlessness about the total impression. Even if we were learning, in a sense, to see every event as a part of the history of all humanity, that history itself seemed unaccountably to let the major interests of humanity slip through its meshes. The reason for this may perhaps be most simply stated by saying that the past, viewed simply as the past, is dead: it lives only in its union with the present and, through the present with the future. Our studies in history never led up to the present; they "petered out," rather inconclusively, with the accession of Queen Victoria, leaving by far the greater mass of the causative factors of present-day life untouched. This, even, presupposed that we had been lucky in a system resembling the children's race-game, by whose rules the player when he has thrown a certain number is obliged to go back so many stages, as the promoted history pupil goes back and begins the Tudor period once again. Needless to say, the thorough study of any period has its educational value; but this is not in itself the true historical value.

All history teaching is unreal in the degree to which it fails to co-ordinate the past with the present, and our method has to aim at effecting that co-ordination in increasing measure. Two attitudes of mind conduce to this aim: the attitude—not strictly a historical attitude at all—by which events are regarded as essentially timeless, and the attitude by which they are seen along a vista stretching from Now to Then. And the two attitudes of mind have to be developed in that order. The historical stories—which are not strictly historical—told or read to young children are timeless stories at first; their

connexion with the present is the connexion of analogy. The story of the Black Prince is timeless, and it is the story of many a modern school-child's father or elder brother; later it becomes historical as well, as a shining instance in the history of the tradition called chivalry. In the same way Greek and Roman history are timeless as they are first taught; gradually they are (or should be so taught) as to show how Mediterranean civilization arose, and flourished, and became European civilization. Directly we speak of European civilization the mind turns to the present throes of Europe, and we wonder what difference it might not have made if European history had been taught, in the schools of all the nations, even for the last fifty years. Here we come to the relations between one line of historical causation and another; and here it is that science (in the wide sense of the term) helps history. It is the business of science to say in what relations things stand to one another; it is the business of history to show how those relations came about.

The most obvious instance of our meaning is the correlation of history with geography, and of both with a relevant proportion of geology, palaeontology, biology—and a few other ologies whose formidable names ought not to scare us away from the duty of understanding and teaching their simpler lessons as to the nature of our world. Co-ordination in the teaching of history, geography, and "natural science" gives surprising results in interest and in effective grasp of knowledge. To choose a single value from a multitude, it is a great help to a child's fundamental understanding of the ways of men and consequently to his patience with history (for all children expect the world to be more perceptibly rational than it really is), if he is

conscious that the ape and tiger—to say nothing of the donkey—die hard in man. And there is also the moral value of the analogy that they die equally hard within the microcosm of his own self. The Black Prince is among other things a shining example of evolutionary triumph. And to make our conception of history travel thus beyond and outside the purview of the history text-book is precisely the way to bring history into relation with the present. Taken as an isolated subject history suffers, perpetual incursions of unexplained event; to cite the largest example, the industrial revolution cannot be explained without calling in the aid of geography and physical science and in point of actual fact formal history teaching throws up the sponge (and reverts with a contented sigh to the Tudor period) when it comes to the industrial revolution and to its main task in the linking of the present with the past.

Perhaps the best general recommendation is that we should be more ready to teach history backwards; to take present facts and events and ask from what causes they arose, what further causes lay behind these, and so on. The method may sound revolutionary to those who have not tried it, and it certainly is revolutionary in its consequences, if to bring history into relation with every sort and kind of knowledge is revolution. It opens our eyes to the fact that very little can be explained, unless misleadingly, in terms of history-book material alone. But it also leads us to enrich and revivify that material surprisingly. It would, of course, be absurd to make the tracing back of causes displace the ordinary methods; its value is that it infuses life into the ordinary methods by inducing recognition of the fact that everything is history.—*The Times Educational Supplement.*

UNIVERSITY OF MADRAS—CONVOCATION ADDRESS.*

The following is the full text of an Address (translated from the French) delivered to the graduates admitted to degrees at the Convocation of the Senate of the University of Madras held on the 22nd November 1917 by His Excellency Monsieur Martineau, Governor of the French Settlements in India, and an Ordinary Fellow of the University.

Your Excellency, Mr. Vice-Chancellor

and Members of the Senate,

Ladies and Gentlemen:—

Allow me first of all to fulfil a pleasant duty in conveying to His Excellency Lord Pentland my feelings of deep and sincere gratitude for having so kindly obtained my admission to your University. I heartily thank you also for consenting to receive me as one of your members. I am deeply moved by this token of cordial sympathy, and I construe it as a graceful homage conferred, beyond my own personality, on the representative of France, the friend and ally of England in a struggle in which both nations are shedding their blood for the cause of civilization. I would also thank His Excellency Lord Pentland for the inspiration which moved him to bestow on me the honour of delivering the annual address to your University. It is the first time, I believe, that such an honour has been conferred upon a Frenchman, and I highly appreciate it while I realize at the same time the danger of my position. It is sometimes less stirring to fight a battle than to deliver a speech.

After the long rivalries in this country between France and England, it may appear strange to some people that a French Governor should come and address you, as though the remembrance of these rivalries were a delicate flower that ought to be cultivated in solitude and mystery, beyond the reach of inquisitive eyes. His Excellency Lord Pentland and myself have thought otherwise. France and England in olden days fought against each other

not only in India, but in the whole world, and the wars in Europe were the most acute and desperate of all. None of you is ignorant of the struggles for supremacy of Philip Augustus and Richard Coeur-de-lion, and a century later, those of the House of Lancaster and the Valois. It looks as if at that period one nation was determined to absorb the other; but when one recollects that the kings of England at that time were of Angevin descent, these wars between the two countries appear, in the eyes of history, rather as a mutual attempt to restore the original unity of the nations than as a determination to erect eternal barriers between the two countries. If Richard or Henri VI have been victorious, one cannot say for certain that Paris would not have remained the capital of the new national unity. The victory of our king Charles VII finally decided the separation of the two States.

The wars of the following centuries were, it is true, inspired by quite different principles. Separated thenceforth by language and religion, France and England strove no longer to form a western block which might then have ruled the world; they engaged in a struggle for economic or maritime supremacy the long developments of which are well-known to you. But it seems that, in these very struggles in which honour, loyalty and bravery held an equal share, the aspirations of the days gone by were unimpaired. They remembered instinctively as it were, that, if in the days of old the two nations had fought each other so closely on the soil of France, it was only with a view to a closer union. So too, after disputes which are still quite recent for territories in Africa in which both nations seemed to be moving towards endless hate, a word, rather or a gesture of one of your kings sufficed to remind both that their hatred was, after all, only thwarted love and, without further explanations, France began to love England and England France.

That love is now eternal. The war with Germany has turned a marriage of prudence into a marriage

* Reproduced from the University edition of the Address.

of affection. It is not for me to throw a glance over the future; it is easy to prophesy, it is still easier to go wrong. But I should not be surprised if, some day, France and England, without abdicating any of their national prerogatives, were to form a sort of political union of both Britains, thereby doing away with the work of Philip Augustus and Joan of Arc, of the Black Prince and Chandos. Such an union would secure the normal development of our necessary traditions under the safeguard of legitimate force.

This explains quite naturally my presence among you, and I am grateful to His Excellency Lord Pentland for having in some way divined my most intimate feelings by permitting me to set forth how closely, in the life of peoples, filial piety with its remembrance of the past can always be allied with the highest aspirations for the future. Since I have, in this address, to deal with history, it seems to me there is no more striking way of demonstrating its utility than by putting before you this summary anew of the general philosophy of the struggles which formerly divided France and England.

It may not be so easy perhaps to make out the philosophy of the history of India, your own country. Going back as far as one can into the night of time and looking at such few precise indications as there are in the *Vedas* and the *Mahabharata*, national stability of any long duration is nowhere to be found. States are formed and overthrown with equal rapidity, as if the popular feeling were indifferent to these frequent changes which on each occasion left the masses overburdened with fresh burdens without ever bringing the least improvement. I will not dwell upon the revolutions in the north, which however are best known to us. The embassy of Megasthenes to Pataliputra, that of the King Kadphises to the Emperor Trajan, the journeys of the two Chinese pilgrims, Fa Hien and Houan Tsang in the fourth and fifth centuries these things occurring at intervals of a few centuries have enabled us to trace without any great degree of certainty sequence of events. I will not even refer to the revolutions except to recall the essential outlines. Any of your histories or encyclopædias will give you more information than I could in a mere lecture.

As you are aware, nothing is known accurately of the dynasties that ruled the country up to the tenth or even the twelfth century. They are mere names emerging in history as do the stems of trees in a forest laid waste by fire. Nobody knows how the fires broke out nor what was its intensity.

We read in Sanskrit books that, as far back as the fourth century before our era, three big dynasties ruled over the Peninsula; the Pandhyas in the extreme south from Pudukota to Cape Comorin, the Cholas from Pudukota to Nellore, and the Cheras on the Malabar coast. But there were others amongst which the Pallavas rank in the first place. They apparently came from the North, settled down in the country by right of conquest, and ruled it from the second up to the tenth century with Kanchi or Conjeeveram as their capital. Some learned authors would have it that under their domination, the seventh and eighth centuries were the great centuries of Hindu art and thought. The Pallavas had terrible struggles to sustain with their neighbours, the Chalukyas; twice they nearly had to submit and, at the end of the ninth century, they were defeated by Aditya I and disappeared from history.

Next to, and to the north of the Pallavas, the Chalukyas in the sixth century, laid in the Deccan the foundation of a comparatively brief dynasty which came to an end about the year 750. Their successors, the Ashtrakutas, immediately after their accession to the empire, built at Ellora the famous Kailasa which is one of the strangest manifestations of religious feeling expressed in one of the most perfect architectural forms. A second Chalukya dynasty, known as the Kalyani, followed the Ashtrakutas but disappeared in its turn about the year 1150.

At the same time the autonomous dynasty of the Hoysalas was established in Mysore about the year 950 in the neighbourhood of Divarassamudra or Halebid; and, on the eastern side of the Deccan, the Yadavas laid the foundation of a mighty empire with Deogiri as capital.

Deogiri is the original name of Daulatabad. It was the good fortune of this town to be for a few years the capital of nearly the whole of India. The importance of its ruins, or rather remains, is a

standing proof of the military efforts that were then made.

But Daulatabad was not a Yadava capital. Three centuries before, the Mohamedans had started the conquest of Northern India. In 1294, one of their rulers, Ala-ud-din, conquered the whole of the Deccan while his lieutenant, the famous Malik Kafur, led his victorious armies to the extreme south of the Peninsula. However, it was one of the successors of Ala-ud-din, the equally famous Mohamed Tagluk, who obtained for Daulatabad the unexpected honour of being a large capital.

What became then of the kingdoms of the Pandhyas, Cholas and Cheras? They disappeared for ever from history under the pressure of the conquering hordes. Owing to the traditional spirit of Hinduism, they were able to last for fifteen centuries without being exposed to serious internal revolutions; the Mohamedan spirit was going to alter the condition of India, not by forcing her to accept its religion as happened in other parts of the world, but by applying to the transfer of powers the strange right of succession of which you are aware, thereby leaving the door open to frequent and unsatisfied rivalries. Henceforth, the reigning power had no longer any strength or real stability, the proof thereof is evinced by the fact that, in the period of six centuries, nine Mohamedan dynasties ruled over Northern India in succession from Mohamed of Ghazni to Akbar. The effort realized by a few sovereigns was rather a personal task than the result of a policy of principle, applied in the name of a national idea.

Malik Kafur was a destroyer and not a builder. Anarchy not being the normal condition of humanity, new national unities soon began to spring forth on the ruins of the vanished dynasties. It was in the fourteenth century that those transformations set in which continued uninterruptedly for a period of 400 years. Thus we see in 1347 the rise of the Mohamedan dynasty of the Bahmanis in the Deccan with Gulbarga as capital, and, in 1356, the great Hindu kingdom of Bijanagar which spread with an unquestioned authority from Goa to Masulipatam, and in a lesser degree in Southern India. The authentic list of Travancore rajahs begins about the same time in 1335.

After this the history of India is a succession of struggles between the Bahmanis and the kingdom of Bijanagar, the latter was nearly always defeated and had to pay tribute on several occasions. But, what the strength of arms could not do was realized by internal dissensions. The Bahmani kingdom began to disaggregate in 1484 and, from this date up to the year 1512 it split up into five autonomous kingdoms, viz., Bijapur, Ahmednagar, Golconda, Bidar and Berar. Only the three first of these left names famous in history.

These five kingdoms, at the head of which were Mohamedan princes, following up the traditions of the Bahmanis, resumed war against the kingdom of Bijanagar, the last remaining rampart of Brahmanic faith in Southern India, and finally overthrew it for ever at the famous battle of Talikot in 1565.

A few years before, the King of Bijanagar had already lost Southern India where the Nayaks had formed an independent dynasty, ruling over Madura and Trichinopoly. The conquerors shared the bulk of the spoils of the conquered and enlarged their respective territories, but still they could not seize the whole of the disrupted kingdom. A part of Southern India escaped their reach and formed the small principalities of the Poligars which remained autonomous for a long while. The Nayak of Madura, after a short resistance, had however to pay tribute to the king of Bijapur.

But these States, formed by fortuitous circumstances, derived no strength either from their traditions or from their geographical situation; time was not given them to consolidate the position. Less than a century after the battle of Talikot, the famous Sivaji had begun to build up the Mahratta nation at the expense of the kingdoms of Bijapur and Ahmednagar. The extraordinary career of that man, who was able to give his contemporaries the illusion of having founded a lasting empire, is well known; he had invented a new military tactic, and it is nearly always innovations like this that decide the fate of empires.

Sivaji died in 1680. A few years after, the kingdoms which he had, disappeared in their turn under a new Mohamedan pressure with Aureng-zeb at its head. The last to succumb was that of Golconda in 1687.

Let us pause a while at this date, which marks, apparently at least, the renewed unity of India, and, without going over the ground again let us call to mind the most important aspects.

As with other countries of the world, wars and internal revolutions did not spare India. Nations like men are never content with what they possess, and the pursuit of ambitions, sometimes chimerical, is as natural to them as the course of a river running into the sea. Brahmanic India, however, seems to have withstood better than any nation in the world the convulsions caused by those ambitions. It is marvellous that some kingdoms were able to last for twelve to fifteen centuries, whereas no Mohamedan empire, save that of the Mogols, ever lasted more than 200 years at the most. Neither the harshness of its princes nor the violences of its ministers were responsible for that longevity of brahmanic India. The Hindu of those days, like the Hindu of to-day was mild, far from quarrelsome, combining a great delicacy of manners with a certain indifference to political controversies. He was ready to obey without being compelled to it by force. A system of law, beyond the comprehension of our western customs, allowed every man to rise in his own sphere up to the highest steps of fortune without, however, making it possible for him to overstep the bounds of a social order where covetousness and rivalries are the first results of liberty. The long political peace of the Peninsula is doubtless due to that system of law. Stability in institutions brought forth to a certain extent the stability in arts and literature. It was in this auspicious epoch that were created the Hoysala and Dravidian temples with their imposing architecture, of which we still admire the grandiose proportions. The Mohamedans, who destroyed those dynasties, succeeded them only as passing guests in the great caravansary of life. But we must admit, in all fairness, that, with few exceptions, they did not act in a sectarian spirit, neither did they impose their religion by force, but adapted themselves to the institutions of India in the same way as the Romans yielded to the attractions of the charms and seductions of the hellenic civilization.

Had time been allowed to them, it is impossible to conjecture what would have been the result of

the contact of these two religions and of these two political systems. But, before it was even possible to recover from the great shocks caused by the fall of kingdoms so powerful and apparently everlasting, Europeans introduced into India new methods which were destined at once to check the development of Islam and to deflect the course of Brahmanic aspirations.

I will not go into the details of the European settlement, nor will I even dwell on its general outlines; the subject is too well known and would take too far out of my course. As you know, the Cape route was sought for and discovered with the object of depriving the Venetians of their trade with India via the Red Sea and the Persian Gulf. The Portuguese were the first to land in India and settled down on the Malabar coast after a series of exploits which, though celebrated by the author of the *Lusiad*, were none the less acts of great and useless cruelty. But, even while imposing themselves on the country, the Portuguese never thought for a moment to lay in India the foundation of a political empire. They rested satisfied with holding strongly a few ports to which all the produce of the hinterland was necessarily diverted. They were thus able to preserve to themselves for a century a monopoly which gave them a temporary wealth. But the success of their undertakings could no longer be concealed; and, when the Dutch, then the English, and at last the French came to know of the profits to be derived from commercial operations in India, they aimed at sharing in them. Serious quarrels were the consequence of that participation and led to occasional massacres. The new-comers were supported in their undertakings by the country's own princes, who for the first time found a way of escaping from the abusing exigencies of the Portuguese. Commercial competition enabled them to sell their produce at somewhat higher prices, but that was not all. Export trade means the payment of export duties, and the best way to increase these was to encourage the settlement of strangers known to be very daring and wealthy traders. Let us insist on this point. The general belief is that, like the Portuguese, other nations of Europe settled down in India by right of conquest or by a display of more or less formidable force.

The truth is that until the arrival of the Europeans the rich products of India were only exported on a small scale, and the princes of the country were often at their wit's end to balance their budget which depended on local taxes not properly defined and still harder to recover. In allowing the Europeans to settle down in their country, they granted them the right to export Indian products in return for the payment of export duties, thereby securing for themselves an assured income at their own disposal and beyond the reach of their ministers, dewans and councillors. They thus became wealthier and more powerful at the same time. This was the sole origin of the pepper question on the Malabar Coast in the first half of the eighteenth century. Bayanor, Prince of Bargaret, granted us the monopoly of the export of his country's pepper in return for the payment of a duty of 2 per cent.; and it was at his urgent request that the Settlement of Mahé was founded. Our misunderstandings with him began when we ran short of cash to buy his produce and to pay him the duties which he was in need of to balance his budget.

All the Indian princes had to do was not to impose excessive duties, which would have killed the trade and driven away the merchants. Moderation was essential and was duly observed, as nobody cared to kill the goose which laid golden eggs. At the same time, the Europeans, impressed by Indian pomp and deluded as to the real power of the nabobs and rajahs, took every opportunity to assert their intention to be and to remain mere traders; they inspired no distrust and were granted sufficient privileges to enable each of them to pose as his own master in his settlement.

This state of things went on till the Franco-British war in 1744. When it broke out, Hindu princes were respected and perhaps feared equally by French and English. Both the companies had made up their minds to avoid anything which might put a stop to trade with the interior. Neither of them thought of extending their limits; on the contrary they considered that an expansion would mean an increased expenditure, which was undesirable from every point of view.

The battle of St. Thomas' Mount in 1746, where the little army of Paradis defeated the much

stronger forces of Mafouz Khan, son of the Nawab of Arcot, took all Europeans by surprise. It went to prove that Indian sovereigns could be easily defeated owing to lack of organization and training. Nevertheless there was no departure from the former policy when the British took possession of Devicotta in the month of June, 1749. Devicotta was a new port on the coast intended to facilitate the trade communications with the King of Tanjore, but Lawrence, who took the town, had no idea of conquering that kingdom.

However, historians consider the year 1749 as the one in the course of which the programme of conquests was resolved upon, and they generally give Dupleix the credit of its inception. It is certain that in that year, when disputes arose for the succession to the titles of Soubah of the Deccan and of the Nawab of Arcot, Dupleix boldly sided with two of the competitors and gave them troops for the defence of their rights. But it is not proved that, in venturing upon that course of action, he was actuated by a desire to extend the French territory. It is more probable that his object was to utilize the military forces which the peace of Aix-la-Chapelle had left idle, and which might become a source of danger. The British were in the same situation; hence their rivalry; but in reality neither the British nor the French were fully convinced of the rights of their respective 'protégés'. In order to estimate the validity of their claims, the modern historian has to form his judgment on principles quite unknown at that time in India. The cheap successes of the French at the outset led them to think that what was so easy to conquer would be equally easy to hold, and the policy of Dupleix was thus inspired by circumstances and developed as they occurred. The reason of its failure is that he had no preconceived programme, as some continue to assert. Dupleix could only succeed with the military and financial help of the Company which he represented, and the Company, adhering to the commercial principles which prescribed the necessity of remaining within easy reach of the coast, could only help Dupleix on condition that he laid before them the new prospects he foresaw and that the Company shared his views. But up to the 16th of October, 1753, Dupleix never

divulged in the least what his programme was; he described the operations in which he was involved as a succession of events, happy for the most part, but these optimistic misrepresentations were cruelly and unexpectedly belied by the capitulation of Trichinopoly. The Company was deeply moved by it and did not consider our successes in the Dekkan as a compensation for our persistent disappointments in the Carnatic. Dupleix realized then that he was bound to give the Company some explanation of his programme and a vindication of his policy, and this was the object of his letter of the 16th of October when he wrote: 'The diversity of opinion, which I observe among my countrymen and, even, among persons responsible for the direction of the East India Company as to what takes place actually in India, compels me to state openly certain truths of which I have been convinced by long experience and to lay the evidence before you.'

'These truths are—

(1) That no trading Company whatsoever can live upon the mere profits of its commerce, but that it must have the guarantee of a safe and regular income, especially when it has to meet heavy establishment charges.

(2) That every such Company should avoid as far as possible the export of bullion.'

Such is the opinion of Dupleix. To have a thorough conception of that programme one should recall to mind that the trade of India was carried on by means of silver bullion imported every year from Europe and minted in India. These funds were paid over to the native dealers who never used to work without such advances. If, for any reason, bullion did not arrive or arrived in insufficient quantity, then the business of the year was jeopardized or lost. The only remedy to that was to have in India itself a safe income, free from the dangers of sea or navigation, and also independent of the remittances expected from Europe. Such an income could only be derived from the country itself, and it was this consideration which led Dupleix to embark in wars which, according to him, were more profitable than the circumstances could lead one to hope. Whereas the ancient settlements of Pondicherry, Karikal and Chandernagor only yielded an

annual income of 580,000 'livres', the new conquests would bring in no less than 1,873,441 'livres' in 1754. To keep a firm hold of the territories occupied was an absolute condition for the uninterrupted collection of that income.

Let me quote the conclusion of this despatch of Dupleix: 'This is not the place for stating what must be done to bring these fortunate beginnings to perfection. It is sufficient for me to prove that a full realization of that necessity compelled me to avail myself of the opportunities which were afforded by events. Not to have done so would have been criminal on my part, and I did it after mature consideration because I felt that thus I could best serve my country. I shall be only too pleased to have preferred worry, anxiety, labour and loss of fortune to the quiet life which I had fully earned if I can persuade you that my sole object was to sacrifice everything to the welfare of my country, the glory of the king and the honour of the nation.'

Is it a matter for regret that the minute was not sent home sooner? When it reached France, the recall of Dupleix had been decided upon and his successor had already left for India. He arrived there imbued with the absolute conceptions of the Company, and the latter finally prevailed. It is nevertheless an historical fact that Dupleix was the first to aim at modern colonization with the political power and territorial supremacy that it involves. One cannot take him to task for having taken so long to understand it instead of realizing it in the first days of the struggle. Man is before all the creature of events, and the day when he won the battles of Arcole and Rivoli, Bonaparte could not foresee that he would create a French empire.

I will not go in further into the relations between French and British in India. My intention was to give you, according to the original documents preserved in Pondicherry, an account of the occupation of Madras by the French in 1747; such events can be recalled to-day without any ill-feeling because, since these unhappy times, the souls of France and England have become united, and nobody can tell to-day whether it is the spirit of Wellington or that of Napoleon which inspires their combatants. This subject however cannot be dealt

with in a single page and my time is limited as is yours. I will close this first part of my address by recalling a precept of Confucius: 'Govern others so that those near you may live happy and those at a distance may come and submit themselves to your laws.' Had Indian Rajahs and Nabobs practised that precept, instead of causing the ruin of their subjects by repeated extortions and wars more personal than national, the battle of Plassey would not have been won owing to the interested desertion of Mir Jaffer; had he accepted battle, the fate of India might have been altered. We must say, in all fairness to England, that, without knowing perhaps the precept of Confucius, she granted peace and material welfare to India, and never stood in the way of any intellectual or moral worth, or of any manifestation of good-will.

I have now to dwell on historical studies in Southern India and, if I am not too daring, on the value and, even, on the importance of history for the inhabitants of this country.

Historical studies in the Peninsula are of comparatively recent date. I will not refer to writings of the eighteenth century, in the first rank of which must be placed the works of Mr. Orme; they are mostly memoirs. The first authors, who began to write in the nineteenth century on India and its past, were British. These are chiefly Grant Duff, author of the 'History of Mahrattas,' Colonel Wilks, with his 'Historical Sketches of Southern India,' Auber, with the 'Rise and Progress of the British Power in India (1837),' Thornton, with the 'History of British Empire in India (1847),' James Mill with his 'History of British India,' Gleig, with the 'Life of Sir Thomas Munro (1830).'

But, after 1860, one begins to observe in India itself a rising tendency towards original researches, and local publications commence to appear which gradually become more numerous, more scientific and more methodical. Besides history, which records events more or less accurately, we now have the publication of archives and the interpretation of confused and incomplete documents by the light of archaeology, epigraphy, numismatics and even anthropology. Stones and coins have a language of their own as well as books. Thus, in 1861-1862, Talboys Wheeler publishes at Madras:

'Madras in the Olden Time', which is a compilation of records from the very beginning up to the year 1748. Without publishing actual documents, Collectors utilize them a little later on for the publication of historical notices in 'District Manuals' which were succeeded by the 'District Gazetteers' whose reputation is well established. These patient investigations were continued by Colonel Love in his 'Vestiges of Old Madras', in which original documents are to be found side by side with the author's narrative.

So far, however, nobody in Southern India or in England has written a full and rational history of the Peninsula. It is indeed a stupendous task to attempt, as it requires a thorough knowledge of events to enable the historian to leave to special treatises facts of minor importance which are out of place in a general history, the object of which should be to discover the hidden causes of events, and follow up their essential developments. Several authors, however, have given us histories of special periods. Sewall has written the history of the kingdom of Bijanagar: 'The Forgotten Empire'; Nagamaiya, that of Travancore; Krishnasawmy Iyengar has published 'Ancient India'; Jouveau Dubreuil has just published in English and in French two important studies on the Pallavas; I myself wrote last year the 'Origins of Mahé'. In addition to histories of a wider interest, there are monographs on particular men and towns; for instance the Biography of Yusuf Khan, the famous rebellious commander of Madras, published in England in 1914 by Mr. Hill, the author of previous essays on India.

It will be seen that the list of books of History in its strict sense is not very long, but we may hope that other writers will add to it before long. When Viceroy of India, Lord Curzon realized that knowledge of the past was not a mere object of curiosity, and he recommended all the Provincial Governments to further historical studies. The Governor of Madras was the first to comply with his wishes, and Sir Alexander Cardew, who was at the Secretariat, undertook the textual publication of the old records, in extenso up to the year 1700. After that date, owing to the copiousness of documents, only specially selected volumes or extracts have been

chosen for publication. The first volume, published in 1908, includes the letters exchanged with Princes, Nabobs and lords of the country which appeared in country correspondence.

The work is proceeding to-day under the supervision of Mr. Dodwell, Curator of Madras Records. Those who are acquainted with Mr. Dodwell know how careful he is about the most minute accuracy, which is the desideratum of every historical work. He has already published a large number of documents, and he is young enough to lead us to hope that he will yet give us a still more important book on the events which he has brought to our notice.

The documents of the seventeenth century appear already in twenty-six volumes or pamphlets, viz., Diary and Consultation Books, Public Despatches from England, Letters to and from Fort St. George, Sundry books, Masulipatam consultation, Minutes of the Mayor's Court of Madraspatam. There are thirty volumes of the documents of the eighteenth century and the first years of the nineteenth century. Those of the eighteenth century only refer to the period between 1740 and 1758; three of these deal with the French correspondence from 1750 to 1752 at the time when was first outlined the policy which was to decide finally the fate of India.

Apart from that series of documents, which is the more important, there is another known as the Baramahal records. They refer to the districts ceded by Tippu in 1792 and are interesting specially from an economical point of view. They give us a clear idea of the state of the country at the time of its cession by Tippu, and of the measures adopted by the British for its administration. That series consists of four volumes and is incomplete.

Other documents (fifteen volumes called 'Dutch Selections') refer chiefly to Cochin. They are extracts from the heap of records of that settlement during the Dutch domination, and have been selected and printed by Mr. Galletti, of the Indian Civil Service. Save the volume No. 13, which is a translation, all these documents have been printed in the original language, Dutch.

The records however are not always of sufficient interest to be published in *extenso*; mere analyses often suffice to make us acquainted with the essential lines. Such an analysis, you will easily under-

stand, requires harder work than the mere publication of documents. Mr. Dodwell has not flinched from it. Less than four months ago, he published the first volume of a calendar or abstract of documents from 1740 to 1744. A second volume, which is in course of preparation, contains a summary of the despatches exchanged between the Council of Madras and the Company.

I will close the series of documents published under the patronage of the Government of Madras by mentioning to you the diary of Ananda Rangapillay, the fourth and fifth volumes of which have just been published by Mr. Dodwell. The previous ones had been edited by Sir Frederick Price. The diary of Ananda Rangapillay, discovered at Pondicherry by Mr. Gallois-Montbrun, is not equally interesting throughout; side by side with historical events on which he throws a real light, there are many trifling details; but, on the whole, the book is interesting, and it was a happy idea to have undertaken its translation and publication.

Following the example of the Government of Madras, that of Pondicherry undertook in 1911 the printing of its old records. Up-to-date there have been published: Letters and treaties with the princes of the country from 1674 to 1793, three volumes of the proceedings of the 'Conseil Supérieur', two volumes of the correspondence exchanged between the 'Conseils Supérieurs' of Pondicherry and Chandernagor, and a 'Résumé' of the Municipal registers of domestic occurrences of Pondicherry from 1676 to 1735. Other volumes are in course of preparation of publication, but, unlike the Government of Madras, that of Pondicherry has shifted the burden of editing these papers on to a private society, called 'Société historique de l'Inde française' which numbers 125 members. That society is responsible for the publications, and the Committee decided last year to issue a special magazine called 'Revue historique de l'Inde française', the object of which is to publish articles of history proper or appreciations of historical facts in addition to very short original documents.

Prompted by the same spirit as the Pondicherry Society, the 'Mythic Society' of Mysore was started two years before in 1909 by Mr. Richards and the Rev. Father Tabard with the help of His Highness

the Maharajah and of Sir Hugh Daly, the British Resident, and now numbers 400 members. In principle, the Society does not publish unedited documents in the shape of separate volumes, but issues a quarterly review in which the members of the Society report the result of their researches of studies either in history, or in archaeology, philosophy, ethnography, and ethnology. The architecture of the Hoysalas, so original and so different from that of the Dravidians, owes it to that Society that it is more widely appreciated. The studies of the Society are not restricted to the State of Mysore but embrace all countries lying to the South of the Wyndhya Mountains. In the work of the Society the Rev. Father Tabard, a resident of Bangalore, for the last thirty-one years, sets an example of wonderful activity in spite of his age, and in that country, where in the time of Hyder Ali and Tippu so many Frenchmen spent the brightest years of their life, it is pleasant to think that it is to another Frenchman, Father Tabard, that we are indebted for keeping alive an interest in the past and in efforts which have met with varying degrees of success.

Mr. Cobb, British Resident, said recently in a speech: 'The Society consists of Indian and British members, its President is French, can there be a happier *entente*.'

In concluding, for the present at least, with Mysore, I would point out that the Maharajah's Government is no less active than that of the Presidency of Madras in the development of historical researches. The study of Sanskrit is greatly encouraged, and it was while devoting himself to this work that Mr. Shama Sastri made a sensational discovery a few years ago. In the library of the town of Mysore he came across the 'Artha Sastra' or science of political economy, written in the fifth century before our era by Kantilya, Minister of the Great King Chandragupta. He has translated and published that work which throws a most curious light on Ancient India. In some ways one would fancy that the 'Artha Sastra' had been written recently, so similar does the art of governing people remain in all times, even under conditions so different in appearance. Although it was written for Bengal, yet it behoved us to refer to it as one of the most wonderful results of historical researches in the Peninsula.

The happy initiative, taken recently by the

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University of Madras, will give, let us hope so, no less interesting results. You have decided, Gentlemen, to create a Professorship of History and Archaeology, which is entrusted to Mr. Krishnasamy Iyengar. Under his guidance a good number of students have already begun to undertake works of criticism and research proper, and I hope that one of them may have the same luck as Mr. Shama Sastri.

Hitherto I have dwelt on the work of Governments, Societies and individuals so far as history proper is concerned. If we now turn to sciences, which may be considered as auxiliary or complementary to it, such as archaeology, epigraphy, numismatics and anthropology, we must recognize that great efforts have been made with considerable results.

There are four archaeological services in Southern India, viz., those of the Presidency of Madras, the Nizam, Mysore and Travancore.

The Madras service, created by the Indian Government and connected with the Archaeological Survey Department of the whole Peninsula, is at present under the direction of Mr. Longhurst. The officials attached to the Department have to devote a part of their time to visiting the districts of the Presidency, finding out the old hidden temples, ordering excavations and taking photographs. The most important towns visited in 1916 were: Udayagiri in the Nellore District, and Guntapalle in the Kistna District. One hundred and forty-seven various photographs have been taken, and two volumes have been published, viz., a new 'Standard book of ancient monuments', and a book written by Mr. Longhurst himself on the ruins of Hampi, in the suburbs of the illustrious old city of Bijanagar. Prior to them the following books had been published by the Department:—'The Buddhist stupas of Amarati and Jaggayapetta', 'South Indian Buddhist antiquities', 'Pallava architecture', 'Chalukyan architecture', 'Monumental remains of the Dutch East India Company.' The photographs collected have been used partly to illustrate the books of Messrs. Vincent Smith, Havell and other writers on Indian art and architecture. The fine collections to be found in the provincial museums have been mostly secured by officers of the Archaeological Department.

The Mysore service was founded by the Government of His Highness the Maharaja with the help of Mr. Lewis Rice; it is at the present moment under

the direction of Rao Bahadur Narasimhachar, whose fame has long since spread beyond the limits of India. His annual reports are eagerly awaited, even by learned European experts and never cause disappointment. In 1915 Mr. Narasimhachar journeyed through the districts of Tumkur, Kadur and Bangalore. He unearthed 350 new documents including a considerable number of sanads and copper-plates bearing inscriptions of a high historical and social interest, some of which are written in a language foreign to the country. Mr. Narasimhachar edits the 'Mysore Gazetteer' and continues the monumental work of 'Epigraphia Carnatica.'

The example given by the Presidency of Madras and the Government of Mysore was followed by the Governments of the Nizam and Travancore. The Archaeological service of the Nizam was established in April, 1914, and, since that date, it has been under the direction of Mr. Yazdani. The latter brought from his inspection of the districts of Medak, Nalgunda, Warangal, Bidar and Aurangabad 134 photographs and a few sketches, some of which are published in the annual report of 1915-1916 and are very nicely edited. They give one a very good idea of the old monuments of Gulbarga, Golconda and Warangal. In September, 1915, an Archaeological Society, under the presidency of the Hon'ble Mr. Fraser, British Resident, was founded with a view to support the work of Government. That Society publishes half-yearly a diary of its works: three numbers have already come out.

The Archaeological service of Travancore, opened in 1890 under the direction of Mr. Sandaram Pillay, ceased to work for a period of fifteen to sixteen years after the latter's death. Then, in 1903, Mr. Gopinath Rao took it up and has succeeded in collecting up-to-date 647 inscriptions of which 125 have been published. He has also published two volumes of 'Travancore Archaeological Series' and two volumes of 'Elements of Hindu Iconography.'

As with historical studies, it is desirable that the various archaeological services should develop more and more. Monuments are also teachers of history, and there are in India a good many of them of wonderful beauty which are worth being brought to the knowledge of the public. Were I allowed to express a wish, it would be that the various Governments, who are anxious to preserve a record of their past, should order casts to be made of the principal works of art, as it is done in Europe. After

organizing in India a central museum of these casts, copies could be sent to England and to France to be exposed in the British Museum and the Trocadéro Museum respectively. Nothing could be better calculated to spread the knowledge of India, and the usefulness of such a step would be unquestionable. Let us hope it will be realized.

Epigraphy is one of the complements of archaeology. It is a study which has already justified itself by its important results.

The Department of Epigraphy, organized at Madras in 1886 by Mr. Hultzsch, has managed to collect up-to-date 20,000 facsimiles about half of which have an historical value. The most ancient, connected with the southern kingdoms, can hardly be older than the seventh century of our era, and yet some inscriptions in Brahmi letters, found in Madura, seem to go as far back as the 3rd century; but these could not be identified. Mr. Hultzsch, who remained in the Presidency up till 1904, edited 'Epigraphia Indica' and several numbers of 'South Indian Inscriptions,' the publication of which is still kept up.

Mr. Hultzsch's collection of facsimiles is not very large; his object was to concentrate all his efforts on special historical points.

In 1899 and 1900, Mr. Venkayya, who acted temporarily for Mr. Hultzsch, adopted a new mode of research which consisted in copying the largest possible number of inscriptions while publishing only a 'résumé' of these in the form of essays or sketches.

The same method has also been followed by Mr. Krishna Sastri since he took up the appointment from Mr. Venkayya in 1908. Every year the Department collects from six to eight hundred new inscriptions, and it is impossible to publish a complete study of every one of them.

It appears to me that a more satisfactory plan would be to convert the publication of 'South Indian Inscriptions' into a quarterly journal like the 'Epigraphia Indica'. For that purpose contributions might be invited from all persons interested in South Indian History, even though they were not connected with the Department.

In the Deccan, the most important discovery was the Asoka edict of Mastri in the district of Raichur, on which a monograph has been written by Mr. Krishna Sastri. More recently, the Archaeological Service of the Nizam's Dominions has published

'The Daulatabad plates' from which we learn that the remotest date connected with the reign of King Jadadekamalla, of the second Chalukya dynasty, was May, 1017. Finally, Mr. Yazdani reproduced in 'Epigraphia Indo-Moslemica' some Mohamedan inscriptions of the fort of Golconda.

The study of Numismatics is still in an embryonic state; nowhere do we find any department organized for that special purpose. Dr. Henderson, Superintendent of the Madras Museum, is now at work on the coins of Hyder Ali and Tippu Sultan.

Ethnography is represented by Dr. Thurston's important work on 'The Castes and Tribes of Southern India', published in 1909 in seven large volumes. The author has described the ways and customs of each tribe in alphabetical order; his descriptions are very minute, and his conclusions do not appear to be subject to correction. Mr. Ananda Krishna, of Cochin, following the example of Mr. Thurston, has recently published a similar volume on the castes and tribes of Cochin, and he still continues his researches. In Mysore, Mr. Nanjundayya, Vice-Chancellor of the University, has undertaken a series of remarkable monographs on the different races and castes of Mysore. About forty have appeared up-to-date, and the work is still proceeding.

Such are the main historical works performed or undertaken in Southern India in the course of recent years. It might perhaps be suggested that the University of Madras should decide upon having, every five years, a meeting similar to this one in the course of which the work done during that period should be reviewed. Such re-unions mark stages in intellectual life, and our Academies of Europe do not act otherwise at their annual meetings. A quinquennial review of this kind would be a precious encouragement to many writers and would also enable the public to take an interest in ideas or researches which are too little known, although they form a privileged part of the national patrimony.

But you might ask: Why make all these efforts? At a time when the whole world is shaken by the most violent convulsions, is it right, is it moral to shake oneself free from present anxieties and to live quietly in the past amidst tombs and recollections? Yes, I think so. In the life of nations it sometimes happens that things go wrong because statesmen are

led too exclusively by considerations of the day or aspirations of the future, without realizing sufficiently that the hour they live is conditioned by the experience of yesterday and by the teachings of the past; and thus often the mistake which we observe are the result of ignorance as well as of want of judgment.

Were it not for these errors, humanity would have reached perfection, and I have my own doubts as to whether perfect life should be considered as an ideal. A society, endowed with perfection, would be monotonous and slightly tedious; at all events, interest in life would vanish if regularity governed all things. And that is why the supreme legislator of the universe has willed that there should be so many rivalries and so many wars between men. Let us bow before these eternal laws, which anyhow must be true since they outlive all periods, all philosophies and all utopias.

History, which traces for us the frail links of events, is like a nymph of early morn whose uncertain profile is only seen in the pale glimmer of dawn; she never appears in the bright sunshine of noon-day nor in bold and clear outlines. Her teachings somewhat resemble consultations of the Sphinx; the facts most widely known are sometimes the most distorted. Therein lies the interest of history, for man is ever a searcher of riddles, and mysteries speak to his heart as well as to his imagination.

The duty of historians, however, is to get rid of mystery and to place man, as he should always be, face to face with his responsibility. This is the moral law of all societies without which none of them can lay claim to the future. The nations which have disappeared are those which gave themselves up without resistance or sought for the normal conditions of their existence in a fancied ideal. The Greeks, lovers of generous ideas and sonorous sentences, died suffocated by the scent of the flowers on which they loved to lie. It is true they left an immortal name, but no nation should have as its foremost ambition to live in memory; the doctrine of the apostolate is good for religion only. Let us leave them the kingdom of heavens, and let us keep for ourselves the kingdom of the earth, our own country, in which we are only passing guests and which demands our love all the more intensely because the dream of life lasts such a little while.

Study then history, Gentlemen students, with the intention of seeking for what leads to the good

enclosing within the intricacies of its atomic form all the mystery of the cosmos, has also imprinted in us the desire to 'question and understand.' To the theological bias was added the misgivings about the inherent bent of the Indian mind towards mysticism and unchecked imagination. But in India this burning imagination which can extort new order out of a mass of apparently contradictory facts, is also held in check by the habit of meditation. It is this restraint which confers the power to hold the mind in pursuit of truth, in infinite patience, to wait, and reconsider, to experimentally test and repeatedly verify.

It is but natural that there should be prejudice, even in science, against all innovations; and I was prepared to wait till the first incredulity could be overcome by further cumulative evidence. Unfortunately there were other incidents and misrepresentations which it was impossible to remove from this isolating distance. Thus no conditions could have been more desperately hopeless than those which confronted me for the next twelve years. It is necessary to make this brief reference to this period of my life; for one who would devote himself to the search of truth must realize that for him there awaits no easy life, but one of unending struggle. It is for him to cast his life as an offering, regarding gain and loss, success and failure, as one. Yet in my case this long persisting gloom was suddenly lifted. My scientific deputation in 1914, from the Government of India, gave the opportunity of giving demonstrations of my discoveries before the leading scientific societies of the world. This led to the acceptance of my theories and results, and the recognition of the importance of the Indian contribution to the advancement of the world's science. My own experience told me how heavy, sometimes even crushing, are the difficulties which confront an inquirer here in India; yet it made me stronger in my determination, that I shall make the path of those who are to follow me less arduous, and that India is never to relinquish what has been won for her after years of struggle.

THE TWO IDEALS.

What is it that India is to win and maintain? Can anything small or circumscribed ever satisfy the mind of India? Has her own history and the

teaching of the past prepared her for some temporary and quite subordinate gain? There are at this moment two complementary and not antagonistic ideals before the country. India is drawn into the vortex of international competition. She has to become efficient in every way,—through spread of education, through performance of civic duties and responsibilities, through activities both industrial and commercial. Neglect of these essentials of national duty will imperil her very existence; and sufficient stimulus for these will be found in success and satisfaction of personal ambition.

But these alone do not ensure the life of a nation. Such material activities have brought in the West their fruit, in accession of power and wealth. There has been a feverish rush even in the realm of science, for exploiting applications of knowledge, not so often for saving as for destruction. In the absence of some power of restraint, civilization is trembling in an unstable poise on the brink of ruin. Some complementary ideal there must be to save man from that mad rush which must end in disaster. He has followed the lure and excitement of some insatiable ambition, never pausing for a moment to think of the ultimate object for which success was to serve as a temporary incentive. He forgot that far more potent than competition was mutual help and co-operation in the scheme of life. And in this country through millenniums, there always have been some who, beyond the immediate and absorbing prize of the hour, sought for the realization of the highest ideal of life—not through passive renunciation, but through active struggle. The weakling who has refused the conflict, having acquired nothing, has nothing to renounce. He alone who has striven and won, can enrich the world by giving away the fruits of his victorious experience. In India such examples of constant realization of ideals through work have resulted in the formation of a continuous living tradition. And by her latent power of rejuvenescence she has readjusted herself through infinite transformation. Thus while the soul of Babylon and the Nile Valley have transmigrated, ours still remains vital and with capacity of absorbing what time has brought and making it one with itself.

The ideal of giving, of enriching, in fine, of self-renunciation in response to the highest call of

humanity, is the other and complementary ideal. The motive power for this is not to be found in personal ambition, but in the effacement of all littlenesses, and uprooting of that ignorance which regards anything as gain which is to be purchased at others' loss. This I know, that no vision of truth can come except in the absence of all sources of destruction, and when the mind has reached the point of rest.

Public life, and the various professions will be the appropriate spheres of activity for many aspiring young men. But for my disciples, I call on those very few, who, realizing some inner call, will devote their whole life with strengthened character and determined purpose to take part in that infinite struggle to win knowledge for its own sake and see tenth face to face.

ADVANCEMENT AND DIFFUSION OF KNOWLEDGE.

The work already carried out in my laboratory on the response of matter, and the unexpected revelations in plant life, foreshadowing the wonders of the highest animal life, have opened out very extended regions of inquiry in Physics, in Physiology, in Medicine, in Agriculture and even in Psychology. Problems, hitherto regarded as insoluble, have now been brought within the sphere of experimental investigation. These inquiries are obviously more extensive than those customary either among physicists or physiologists, since demanding interests and aptitudes hitherto more or less divided between them. In the study of nature, there is a necessity of the dual view point, this alternating yet rhythmically unified interaction of biological thought with physical studies, and physical thought with biological studies. The future worker with his freshened grasp of physics, his fuller conception of the inorganic world, as indeed thrilling with 'the promise and potency of life' will redouble his former energies of work and thought. Thus he will be in a position to win now the old knowledge with finer sieves, to re-search it with new enthusiasm and subtler instruments. And thus with thought and toil and time he may hope to bring fresher views into the old problems. His handling of these will be at once more vital and more kinetic, more comprehensive and unified.

The further and fuller investigation of the many

and ever-opening problems of the nascent science which includes both life and non-life are among the main purposes of the Institute I am opening to-day; in these fields I am already fortunate in having a devoted band of disciples, whom I have been training for the last ten years. Their number is very limited, but means may perhaps be forthcoming in the future to increase them. An enlarging field of young ability may thus be available, from which will emerge, with time and labour, individual originality of research, productive invention and some day even creative genius.

But high success is not to be obtained without corresponding experimental exactitude, and this is needed to-day more than ever, and to-morrow yet more again. Hence the long battery of super-sensitive instruments and apparatus, designed here, which stand before you in their cases in our entrance hall. They will tell you of the protracted struggle to get behind the deceptive seeming into the reality that remained unseen;—of the continuous toil and persistence and of ingenuity called forth for overcoming human limitations. In these directions through the ever-increasing ingenuity of device for advancing science, I see at no distant future an advance of skill and of invention among our workers; and if this skill be assured, practical applications will not fail to follow in many fields of human activity.

The advance of science is the principal object of this Institute and also the diffusion of knowledge. We are here in the largest of all the many chambers of this house of knowledge—its Lecture Room. In adding this feature and on a scale hitherto unprecedented in a research institute I have sought permanently to associate the advancement of knowledge with the widest possible civic and public diffusion of it; and this without any academic limitations, henceforth to all races and languages, to both men and women alike, and for all time coming.

The lectures given here will not be mere repetitions of second-hand knowledge. They will announce, to an audience of some fifteen hundred people, the new discoveries made here, which will be demonstrated for the first time before the public. We shall thus maintain continuously the highest aim of a great seat of learning by taking active part

in the advancement and diffusion of knowledge. Through the regular publication of the transactions of the Institute, these Indian contributions will reach the whole world. The discoveries made will thus become public property. No patents will ever be taken. The spirit of our national culture demands that we should for ever be free from the desecration of utilizing knowledge for personal gain. Besides the regular staff there will be a selected number of scholars, who by their work have shown special aptitude and who would devote their whole life to the pursuit of research. They will require personal training and their number must necessarily be limited. But it is not quantity but quality that is of essential importance.

It is my further wish, that as far as the limited accommodation would permit, the facilities of this Institute should be available to workers from all countries. In this I am attempting to carry out the traditions of my country, which so far back as twenty-five centuries ago, welcomed all scholars from different parts of the world, within the precincts of its ancient seats of learning, at Nalanda and at Taxilla.

THE SURGE OF LIFE.

With this widened outlook, we shall not only maintain the highest traditions of the past but also serve the world in nobler ways. We shall be at one with it in feeling the common surgings of life, the common love for the good, the true and the beautiful. In this Institute, this study and garden of life, the claim of art has not been forgotten, for the artist has been working with us, from foundation to pinnacle, and from floor to ceiling of this very hall. And beyond that arch, the laboratory merges imperceptibly into the garden, which is the true laboratory for the study of life. There the creepers, the plants and the trees are played upon by their natural environments,—sunlight and wind, and the chill at midnight under the vault of starry space. There are other surroundings also, where they will be subjected to chromatic action of different lights, to invisible rays, to electrified ground or thunder-charged atmosphere. Everywhere they will transcribe in their own script the history of their experience. From his lofty point of observation, sheltered by the trees, the student will watch this panorama of life. Isolated from all

distractions, he will learn to attune himself with nature; the obscuring veil will be lifted and he will gradually come to see how community throughout the great ocean of life outweighs apparent dissimilarity. Out of discord he will realize the great harmony.

THE OUTLOOK.

These are the dreams that wove a network round my wakeful life for many years past. The outlook is endless, for the goal is at infinity. The realization cannot be through one life or one fortune but through the co-operation of many lives and many fortunes. The possibility of a fuller expansion will depend on very large endowments. But a beginning must be made, and this is the genesis of the foundation of this Institute. I came with nothing and shall return as I came; if something is accomplished in the interval, that would indeed be a privilege. What I have I will offer, and one who had shared with me the struggles and hardships that had to be faced, has wished to bequeath all that is hers for the same object. In all my struggling efforts I have not been altogether solitary; while the world doubted, there had been a few, now in the City of Silence, who never wavered in their trust.

Till a few weeks ago it seemed that I shall have to look to the future for securing the necessary expansion of scope and for permanence of the Institute. But response is being awakened in answer to the need. The Government have most generously intimated their desire to sanction grants towards placing the Institute on a permanent basis the extent of which will be proportionate to the public interest in this national undertaking. Out of many who would feel an interest in securing adequate endowment, the very first donations have come from two of the merchant princes of Bombay, to whom I had been personally unknown.

A note that touched me deeply came from some girl-students of the western province, enclosing their little contribution 'for the service of our common motherland.' It is only the instinctive mother-heart that can truly realize the bond that draws together the nurelings of the common home-land. There can be no real misgiving for the future when at the country's call man offers the strength of his

life and woman her active devotion; she most of all, who has the greater insight and larger faith because of her life of austerity and self-abnegation.

Even a solitary wayfarer in the Himalayas has remembered to send me a message of cheer and good hope. What is it that has bridged over the distance and blotted out all differences? That I will come gradually to know; till then it will remain enshrined as a feeling. And I go forward to my appointed task, undismayed by difficulties, companionship by the kind thoughts of my well-wishers, both far and near.

INDIA'S SPECIAL ATTITUDE IN CONTRIBUTION TO SCIENCE.

The excessive specialization of modern science in the West has led to the danger of losing sight of the fundamental fact that there can be but one truth, one science which includes all the branches of knowledge. How chaotic appear the happenings in nature! Is nature a cosmos, in which the human mind is some day to realize the uniform march of sequence, order and law? India through her habit of mind is peculiarly fitted to realize the idea of unity, and to see in the phenomenal world an orderly universe. This trend of thought led me unconsciously to the dividing frontiers of different sciences and shaped the course of my work in its constant alterations between the theoretical and the practical, from the investigation of the inorganic world to that of organized life and its multifarious activities of growth, of movement, and even of sensation. On looking over a hundred and fifty different lines of investigations carried on during the last twenty-three years, I now discover in them a natural sequence. The study of electric waves led to the devising of methods for the production of the shortest electric waves known and these bridged over the gulf between visible and invisible light; from this followed accurate investigation on the optical properties of invisible waves, the determination of the refractive powers of various opaque substances, the discovery of effect of air film on total reflection and the polarising properties of strained rocks and of electric tourmalines. The invention of a new type of self-recovering electric receiver made of galena was the forerunner of application of crystal detectors for extending the range

of wireless signals. In physical chemistry the detection of molecular change in matter under electric stimulation led to a new theory of photographic action. The fruitful theory of stereochemistry was strengthened by the production of two kinds of artificial molecules, which like the two kinds of sugar, rotated the polarised electric wave either to the right or to the left. Again the 'fatigue' of my receivers led to the discovery of universal sensitiveness inherent in matter as shown by its electric response. It was next possible to study this response in its modification under changing environment, of which its exaltation under stimulants and its abolition under poisons among the most astonishing outward manifestations. And as a single example of the many applications of this fruitful discovery, the characteristics of an artificial retina gave a clue to the unexpected discovery of 'binocular alternation of vision' in man;—each eye thus supplements its fellow by turns, instead of acting as a continuously yoked pair, as hitherto believed.

PLANT LIFE AND ANIMAL LIFE.

In natural sequence to the investigation of the response in 'inorganic' matter, has followed a prolonged study of the activities of plant life as compared with the corresponding functioning of animal life. But since plants for the most part seem motionless and passive, and are indeed limited in their range of movement, special apparatus of extreme delicacy had to be invented, which should magnify the tremor of excitation and also measure the perception period of a plant to a thousandth part of a second. Ultra-microscopic movements were measured and recorded; the length measured being often smaller than a fraction of a single wavelength of light. The secret of plant life was thus for the first time revealed by the autographs of the plant itself. This evidence of the plant's own script removed the long standing error which divided the vegetable world into sensitive and insensitive. The remarkable performance of the praying palm tree of Faridpore, which bows, as if to prostrate itself, every evening, is only one of the latest instances which show that the supposed insensibility of plants and still more of rigid trees is to be ascribed to wrong theory and defective observation.

My investigations show that all plants, even the trees, are fully alive to changes of environment; they respond visibly to all stimuli, even to the slight fluctuations of light caused by a drifting cloud. This series of investigations has completely established the fundamental identity of life-reactions in plant and animal, as seen in a similar periodic insensibility in both, corresponding to what we call sleep: as seen in the death-spasm, which takes place in the plant as in the animal. This unity in organic life is also exhibited in that spontaneous pulsation which in the animal is heart-beat; it appears in the identical effects of stimulants, anaesthetics and of poisons in vegetable and animal tissues. This physiological identity in the effect of drugs is regarded by leading physicians as of great significance in the scientific advance of medicine; since here we have a means of testing the effect of drugs under conditions far simpler than those presented by the patient, far subtler too, as well as more humane than those of experiments on animals.

Growth of plants and its variations under different treatment is instantly recorded by my Crescograph. Authorities expect this method of investigation will advance practical agriculture; since, for the first time we are able to analyse and study separately the conditions which modify the rate of growth. Experiments which would have taken months and their results vitiated by unknown changes, can now be carried out in a few minutes.

Returning to pure science no phenomena in plant life are so extremely varied or have yet been more incapable of generalization than the 'tropic' movements, such as the twining of tendrils, the heliotropic movements of some towards and of others away from light, and the opposite geotropic movements of the root and shoot, in the direction of gravitation or away from it. My latest investigations recently communicated to the Royal Society have established a single fundamental reaction which underlies all these effects so extremely diverse.

Finally, I may say a word of that other new and unexpected chapter which is opening out from my demonstration of nervous impulse on plants. The speed with which the nervous impulse courses through the plant has been determined; its nervous

excitability and the variation of that excitability have likewise been measured. The nervous impulse in plant and in man is found exalted or inhibited under identical condition. We may even follow this parallelism in what may seem extreme cases. A plant carefully protected under glass from outside shocks, looks sleek and flourishing; but its higher nervous function is then found to be atrophied. But when a succession of blows is rained on this effete and bloated specimen, the shocks themselves create nervous channels and arouse anew the deteriorated nature. And is it not shocks of adversity, and not cotton-wool protection that evolve true manhood?

A question long perplexing physiologists and psychologists alike is that concerned with the great mystery that underlies memory. But now through certain experiments I have carried out, it is impossible to trace 'memory impression' backwards even in inorganic matter, such latent impressions being capable of subsequent revival. Again the tone of our sensation is determined by the intensity of nervous excitation that reaches the central perceiving organ. It would theoretically be possible to change the tone or quality of our sensation, if means could be discovered by which the nervous impulse would become modified during transit. Investigation on nervous impulse in plants has led to the discovery of a controlling method, which was found equally effective in regard to the nervous impulse in animals.

Thus the lines of physics, of physiology and of psychology converge and meet. And here will assemble those who would seek oneness amidst the manifold. Here it is that the genius of India should find its true blossoming.

The thrill in matter, the throb of life, the pulse of growth, the impulse coursing through the nerve and the resulting sensations, how diverse are these and yet how unified! How strange it is that the tremor of excitation in nervous matter should not merely be transmitted but transmitted and reflected like the image on a mirror, from a different plane of life, in sensation and in affection, in thought and in emotion. Of these which is more real, the material body or the image which is independent of it? Which of these is undecaying, and which of these is beyond the reach of death?

PATNA UNIVERSITY.

Sir Edward Gait's Address.

The first meeting of the Senate of the Patna University was held on Saturday, the 8th instant, in the Patna Collegiate School Hall. Among other important business transacted the Budget was passed and a Committee of 15 members of the Senate was appointed to consider the Draft Regulations and to report to the Senate at a meeting to be held for the purpose on January 21st.

In the morning before the Senate meeting His Honour Sir Edward Gait, as Chancellor of the new University, received the members of the Senate in the Durbar Hall at Government House. After an address by the Vice-Chancellor on behalf of the Senate, the Chancellor replied. The following is the text of His Honour's speech:—

Mr. Vice-Chancellor, and Fellows of the Patna University:

It is a very great pleasure to me to meet you here this morning and to realise that the Patna University, the creation of which has been engaging our earnest attention for so long has at last come into existence. When the Province of Bihar and Orissa was constituted in the year 1912 the first care of the Local Government was to take steps to render the province complete and self-contained by the establishment of a separate High Court and a separate University. It is now nearly two years since the High Court was opened by Lord Hardinge, the late Viceroy. The creation of a University has taken longer, but the delay was unavoidable, as many intricate questions had first to be settled; and before a solution had been reached the outbreak of war dislocated all our plans.

The ideal form of a University is one in which all the component colleges are situated in the same place and all the students reside in their respective colleges. In a University of this kind a large number of teachers and students are gathered at a single centre. Where there are many teachers there naturally arises a division of labour and the teaching of each main subject is divided among a number of lecturers and tutors, each of whom has thus an opportunity of becoming an original worker in, or at least a complete master of, the com-

It was a woman in the Vedic times, who when asked to take her choice of the wealth that would be hers for the asking, inquired whether that would win for her deathlessness. What would she do with it, if it did not raise her above death? This has always been the cry of the soul of India, not for addition of material bondage, but to work out through struggle her self-chosen destiny and win immortality. Many a nation had risen in the past and won the empire of the world. A few buried fragments are all that remain as memorials of the great dynasties that wielded the temporal power. There is, however, another element which finds its incarnation in matter, yet transcends its transmutation and apparent destruction: that is the burning flame born of thought which has been handed down through fleeting generations.

Not in matter, but in thought, not in possessions or even in attainments but in ideals, are to be found the seed of immortality. Not through material acquisition but in generous diffusion of ideas and ideals can the true empire of humanity be established. Thus to Asoka to whom belonged this vast empire, bounded by the inviolate seas, after he had tried to ransom the world by giving away to the utmost, there came a time when he had nothing more to give, except one half of an *Amlaki* fruit. This was his last possession and his anguished cry was that since he had nothing more to give, let the half of the *Amlaki* be accepted as his final gift.

Asoka's emblem of the *Amlaki* will be seen on the cornices of the Institute, and towering above all is the symbol of the thunderbolt. It was the Rishi Dadhichi, the pure and blameless, who offered his life that the divine weapon, the thunderbolt, might be fashioned out of his bones to smite evil and exalt righteousness. It is but half of the *Amlaki* that we can offer now. But the past shall be reborn in a yet nobler future. We stand here to-day and resume work to-morrow so that by the efforts of our lives and our unshaken faith in the future we may all help to build the greater India yet to be.—*The Leader*.

paratively limited field of knowledge which has been allotted to him. Thus an atmosphere of genuine learning and of co-operation in the pursuit of knowledge is diffused throughout the colleges, to the great benefit of students and professors alike. A spirit of wholesome and friendly emulation is largely aroused between one college and another. The professors are thus stimulated to improve their teaching to the utmost of their ability, for the honour of the University and of their respective colleges. The students, on their side, benefit, not only by the deeper learning and greater zeal of the professors, but also by the wider choice of lectures which is open to them, as the professors in different colleges will specialise in different branches of their subject.

If we had been starting with a clean slate it is probable that we should have endeavoured to establish a centralised University of the kind I have described. We had, however, to recognise the fact that colleges are already in existence at several centres, and it would have been impossible, or at any rate very expensive and unpopular, to deprive local students of the facilities which they have hitherto enjoyed of gaining a collegiate education in the neighbourhood of their own homes. In these circumstances the Patna University Committee which was ably presided over by Mr. Nathan steered a middle course. They proposed on the one hand the creation of a Central University, where, with certain exceptions in the case of Cuttack, all Honours and Post-graduate teaching would be concentrated, and, on the other, the maintenance of the existing colleges for education up to a Pass degree in Arts and the Intermediate examination in Science. I will quote in the Committee's own words their inspiring ideal of the Central University. In it, they said, "laboratories, lecture-halls and seminaries, a library and a museum, and other similar facilities will be provided for the common use, while ample accommodation and opportunities will be afforded for all kinds of games, and for the various associations and social amenities which a University should encourage. Grouped around the central institution will be four Arts colleges, a Sanskrit college and a Training college for teachers. These colleges will be residential and will be so designed

and conducted that students may be well-cared for and that they may have every opportunity to enjoy a happy and useful University career."

The scheme of the Committee has been criticised as constituting an attempt to combine two things which are incompatible. But I do not think we need take fright at this theoretical objection. I see no reason to suppose that their scheme will fail to work well in practice. Moreover, the Committee expressly said that they regarded the composite University as a transitory arrangement, and that they contemplated the establishment hereafter of new colleges at each of the outlying centres, which in the fulness of time would grow into independent Universities. In this respect Orissa may be expected to lead the way. The Ravenshaw College at Cuttack is already over-crowded, and the time cannot be far distant when a second college will be established at that centre. It will then be a matter for consideration whether the time has come for the creation of a separate University for Orissa, or whether it would be better to wait until the growing demand for higher education necessitates the establishment of a third college there. It may be said that in talking thus I am peering too far into the future. But I have good reason for my faith. The consummation which I contemplate cannot be far distant if collegiate education continues to grow at the present rapid rate. The number of students in the colleges of Bihar and Orissa has risen from 1430 in the year 1912 when our province was created to 2575 in the present year of grace; and it is obvious that if their number continues to grow at this rapid rate, the demand for new colleges will soon become too strong to be resisted.

The construction of the buildings of the Central University on the generous lines recommended by Mr. Nathan's Committee would have involved an expenditure of 77 lakhs of rupees. It was hoped that the Government of India would provide the necessary funds. By the time the Committee's Report was dealt with, however, war had broken out, and it became clear that if the creation of a Patna University were to be postponed until this large sum of money had been provided and the buildings of the Central University and its colleges had been completed, Bihar and Orissa would have to wait many

years for this greatly-to-be-desired consummation. The Local Government, therefore, when forwarding the report of Mr. Nathan's Committee to the Government of India, recommended that the University should be brought into being at once as an examining University, similar to those already in existence in Calcutta, Allahabad and elsewhere, and that the central buildings should be constructed gradually as funds permit. This proposal was sanctioned and the legislation necessary to give effect to it was taken in hand. Meanwhile we have acquired the land for the central buildings and our architect in consultation with an influential committee is busy working out the plans for the buildings which are most urgently needed. The whole Senate will, of course, be fully consulted regarding these plans as soon as they are sufficiently advanced. A great deal has already been done to improve the outlying colleges. Their professorial staffs have been strengthened considerably, and three of them will be provided with entirely new buildings.

As the Vice-Chancellor has said, the provisions of the Bill to constitute the Patna University as originally introduced into the Council gave rise to considerable controversy. This, I hope, has now ceased, and nothing would be gained by referring in detail to the points at issue. I will only say that the first draft of the Bill went further than the Local Government had proposed in the endeavour to introduce a type of University which would attain a standard of teaching and a realisation of the highest benefits of a composite University such as none of the existing Universities in India attempt to supply. This necessarily involved a strong academic rather than either Government or popular control. The changes made with this object, however, created in the public mind a suspicion that the intention of the Bill was to obtain greater official control, and some of its provisions were severely criticised. Although there was no real foundation for this suspicion, the Local Government had no desire to force an unpopular measure on the people of Bihar and Orissa, and when it became apparent that the choice lay between the abandonment of the Bill as a contentious measure that could not be pressed in war time—an alternative which involved the indefinite postponement of the new University—and, on the other hand, a modification of the Bill that would make it more acceptable, Government had no hesitation in adopting the latter course, and

accordingly did all in their power to meet the views of the public. Extensive alterations were made in the Bill in the Select Committee, and I hope and believe that all who are competent to form an opinion on this highly technical subject will recognise that in the form in which it has now been passed into law the Bill gives ample power to the representatives of the public. In particular, it will be noted that although the elective principle could not be applied in the first instance, there will eventually be an elective majority in the Senate. Moreover, in nominating the members of the first Senate we have been guided solely by the desire to select those who are best qualified, either by reason of their personal attainments, or because they represent the views of the educated classes in the province; and you have no doubt observed that the latter category includes several of the gentlemen who were most prominent in their criticism of the provisions of the Bill as originally introduced. The higher education of the people of the province is now definitely in their own hands. It is a great trust, and I hope and believe that it will prove to have been wisely given, and that the members of the Senate will perform their duties with the sole idea of promoting to the utmost of their ability the cause of higher education in the province. I am confident that they will all co-operate in a spirit of moderation, forbearance and friendliness in the development of the Patna University. Differences of opinion are bound to arise, but when they do, I hope that those on the one side will give those on the other credit for a single minded desire to do their best for the Patna University, the success of which we all most earnestly desire.

Your first duty will be to examine the draft regulations which have been prepared by the Vice-Chancellor. Mr. Jennings has, I know, taken very great trouble over this difficult and technical, and at the same time, most important task, for which he is specially qualified by his experience of the practical working of the regulations of the Allahabad and Calcutta Universities. I have no doubt, however, that good as his draft may be, you will be able to improve it.

Mr. Jennings has referred in touching terms to the announcement in a recent casualty list of the death in action of temporary Capt. C. Russell, I.A.R.O., the permanent Principal of the Patna College. As the Local Government had not received direct from the Army Department the intimation

usual in such cases, I hoped at first that there might be some mistake; but I deeply regret to say that I have now received a telegram in reply to the enquiry which I made which removes all doubt. No one could wish for a better or nobler end than to die fighting in a just and righteous cause against the enemies of his country, and indeed of civilisation itself. While, therefore, we do not regret for his own sake the brave man who like so many of our best and noblest, has now made the supreme sacrifice, we still deeply deplore his death, not only for the sake of his many friends, but also because of the grievous loss which it involves to the cause of education in this Province, and particularly to the Patna College, to whose welfare he was so greatly attached. His one ambition in life was to promote the interest of his College and of the students entrusted to his care. Some years ago Mr. Russell was offered the officiating appointment of Director of Public Instruction. To most men of his standing the temptation would have been too great to be resisted, but Mr. Russell had no hesitation in refusing it on the ground that he did not wish to leave his work in the Patna College.—*The Statesman*.

EDUCATION IN ENGLAND.

PARALLEL MOVEMENTS IN GERMAN AND ENGLISH EDUCATION SINCE THE BEGINNING OF THE WAR.

The following informing contribution from Dr. M. E. Sadler appears in the November number of *Indian Education* :—

Since the war began, only a limited circle of privileged people have had access to current books and journals published in Germany. Not knowing the grounds for this restriction upon the circulation of German publications in this country in war-time, I do not enter here upon any criticism of the policy which has cut off almost every private student in England from first-hand knowledge of what is now being written in Germany on social, philosophical and economic questions. In order to prevent trading with the enemy, it was obviously necessary to interfere with the import through neutral countries, and with the distribution in the United Kingdom, of the products of German industry. But it is curious that steps were not taken to secure,

through official channels, a full supply of German books and scientific periodicals and to deposit them in the great Universities and Public Libraries of the country for consultation and use by qualified persons. The extracts from current German literature which reach the public in war-time through the newspapers and weekly reviews are quite inadequate for scientific purposes and are almost always selected hurriedly and with regard to what will take the popular fancy at the moment. In the best English books on the war and in some magazine articles, well-considered summaries of certain departments of current German literature may be found. But the materials upon which such summaries can be based are in very few hands and the private student has (except as regards discussions on the origin of the war) been almost as isolated from German thought as if he had been in prison. The student of education has been in particularly bad case. The daily and weekly press has ignored current German literature on the aims and methods of education, except that now and again some quite inadequate reference has been made to the subject. This is particularly unfortunate because, since the war began, the discussion in Germany about the bearing of educational influences upon national life has been even more eager and general than in England. Our newspapers, with the information which could have been put at their disposal, might easily have kept their readers informed as to the significant trend of German thought about education under the stress of war. That they have failed to do so implies a belief that English readers are not disposed to take any interest in these subjects—a belief which is probably a fallacy and, if well-grounded, ought to lead to immediate efforts to show the bearing of educational thought and practice upon modern politics.

It so happens that in the field of education the present movement of German thought is of high importance to those who are interested (and who is not?) in the deeper issues of the war. Liberal ideas about the organisation of national education are sweeping over Germany. It is evident that many of

the officials in the various Government Education Departments in Germany are sympathetic with some of the aims of the new movement and disposed to make great concessions to it. But one phalanx resists the disorganised crowd of reformers. That phalanx is Prussia. The Prussian Junker stands like granite against educational plans which, if realised, would ultimately undermine his social privilege and economic advantage. And the Prussian Junker knows how to influence the mind of the leading bureaucrats in Berlin. The Prussian Education Office (though it includes many men of liberal tendencies) has been cowed by the fear of Junker hatred. Therefore, though there is a striking movement throughout Germany in favour of making the privileges of national education more effectively open to the masses of the people, the Education Office in Berlin (in spite of certain waverings and conciliatory, though ambiguous, speeches) has remained immovable. In the South of Germany the liberal movement is stronger, but over against it the Catholic Party stands suspicious and reluctant to move. This is due partly to the conservatism of the institution with which it is connected partly to the fact that the Roman Catholic point of view is discordant with some of the chief pre-suppositions of modern liberal thought on education and definitely opposed to the most extreme social views which usually accompany advanced thought on educational questions. The result is that, though some Roman Catholics (especially Professor Forster of Munich) are prepared for the frank discussion of educational aims and for great reforms in present practice, the more silent mass of the Roman Catholic leaders stand aloof from the discussion but intervene at the last moment when decisive official action is threatened.

What has happened in German politics about the war is thus exactly reflected in what has taken place in German discussion about education. The liberal movement has grown immensely in power since the campaign took an unfavourable turn to German interests. Like the Majority Socialists, the more extreme educational

reformers have been brought for the first time into something like administrative co-operation with the Government. They have given up some of their own cherished theories in hope of getting something done, but at the same time have modified very deeply the conventional views of the officials and of the moderate politicians. Just as the wave of liberal feeling about the methods and responsibilities of Government rose to a crest in Germany three months ago, so did the feeling about education and the desire to break down the barriers which have kept higher education in Germany, to a degree not always realised, the appanage of the middle and the higher class. What Einzberger, the Roman Catholic Free-lance, has been in the Reichstag, Professor F. W. Forster has been in the sphere of education. But in education as in politics, the closely welded mass of the Prussian tradition has broken the wave of reform, and the majority of the Catholic party, in education as in politics, has disowned its free-lances, after playing with their ideas until the remorseless opposition of the Prussian Conservatives was disclosed.

In Germany as in England, it is realised that the methods and aims of elementary education will have to be reconsidered if the people are to be given real responsibility in the higher affairs of State. The German elementary school is admirably organised for a particular purpose. In part that purpose is becoming obsolete. It has been kept as a department of State separate from secondary and higher education. Its teachers have been trained not at the Universities but in special Seminaries. It is rigidly inspected by a body of men who inherit a belief that the elementary school must make diligent workmen, obedient citizens, industrious mothers of families. It imparts with authority a religious doctrine from which multitudes of the working people are openly estranged. It inculcates, both by direct teaching and still more by suggestion, a political view which is unhesitatingly favourable to the existing regime, and in glaring contrast to

the professed convictions of the largest of all the political parties in the Empire. However clever an urban labourer's boy or girl may be, the odds are heavily against their climbing over in time the obstacles deliberately set up in order to make egress from the elementary school system difficult. However promising may be the scientific or linguistic gift of a youth whose parents have assigned him early to the elementary school teaching profession, the chances are heavily against his ever getting to the University. There are exceptions to all this of course. In some respects the boy of brilliant promise in a rural district has more chance of being picked out and given a higher education than a similar boy in the working-class district of a German industrial city. The reason for this is that he is more conspicuous and may find a friend who, by special teaching or advice, will help him in time to get upon the lower rungs of the ladder which alone leads up to professional positions and to posts of greater responsibility. But, in the main, the German secondary and higher school system is wired round with restrictions designed for a political purpose. It is these barriers that are now threatened. The more advanced parties in Germany demand a complete reorganisation of the whole educational system. They insist that the basis of the whole should be the common elementary school, the same for everybody, the unique avenue to higher education. This change, its advocates believe, would abolish what in England we call snobbery and would secure a union of social sympathies throughout the nation. They would make the education given in these schools (*Einheitsschulen*, as they call them) modern and liberal, a common basis for all higher and more advanced education. Every boy or girl would pass through such a school up to 14 years of age (with some differentiation of studies in the later years of the course and with separation in parallel divisions, of the slower learners from the more precocious) and the secondary schools would be built as a second story of the edifice

upon this one foundation. The preparatory schools at present attached to the secondary schools would be abolished. Private schools would not be allowed. The religious education would be undenominational. Every faith would have equal right. The more extreme party would have the school secular. The present curriculum of the secondary schools would be revolutionised in order that a pupil could pass on quite naturally from the highest class in the elementary to what would then be the lowest class in the secondary school.

There is no likelihood of this scheme being realised. It might possibly be introduced as a result of a sweeping revolution in Germany; but it would quickly be modified in the light of inevitable experience. The German theorists who advocate the *Einheitsschule* ignore the inseparable connexion between education and social traditions and underrate the importance of home surroundings and family influences in the education of young people. They have isolated the school from its social context. They exaggerate the power of the school as compared with the power of social tradition. They ignore the tenacity of social differences. They have over-simplified their problem. By thinking too exclusively of the work of schools they have narrowed their view of education. But there is force in their objection to the present system. What is likely to happen, as one of the political changes which will follow the war, is the opening out of an easy passage from the elementary to the secondary school. The *Mittelschule*, long the Cinderella of the Prussian Education Office, will at last come into its own. In other words, the higher parts of the elementary school system will be differentiated and an education which is intermediate between the most advanced secondary and the elementary schools will be encouraged and developed. Furthermore, those intending to be teachers in elementary schools will be given more access to Universities. The present isolation of the elementary school teachers' training colleges will be modified.

In other words, the prevailing current in German educational thought is moving in the English direction. What we have done in this country, Germany now sees to be necessary under modern conditions. The educational theories of the Junker and of the older type of Prussian bureaucracy are nearing their last ditch. It is probable that, twenty years hence, the stiffness of the present system will be greatly relaxed, and the claims of the masses of the people will be more generously recognised. The strength of this new movement is so great that it is not hazardous to draw inferences from it as to the political and social outlook of the German people after the war.

One necessary change in German education will be the increase in the number of women teachers, especially in the public elementary schools. The experience of the war and the loss of so large a number of young men will force Germany to abandon the old bureaucratic prejudices against giving a responsible place to women in national education. The change, which began in America and is now so conspicuous in England, will spread to Germany. Nothing will affect so deeply the tradition of internal discipline in the German schools. It is at present, for good and evil, a masculine discipline, apt to be rough and inconsiderate and to take on some of the bad features of militarism.

Twenty years ago, a little book called *Pädagogische Goldkornen* was popular among German teachers and was put into the hands of those who were entering the profession. It is a collection of educational aphorisms for the guidance of teachers. So long ago as 1893 it had run into its sixth edition. The fifth aphorism in the book dealt with the function of women as teachers. It was a quotation from a Dr. Stern. He wrote: 'In the intellectual side of education, women must inevitably take a very limited and secondary part. The reason for this is that a woman's nature does not possess the first con-

dition required by a capable teacher, namely the power of logical deduction and of developing a subject according to a clearly conceived, definite plan. Women have not the capacity to make a synthesis out of separate facts or to find a general law from a number of individual instances. Nor can they put their pupils in the way of accomplishing this act of thought. The most beautiful relation which a woman teacher can have in a school is that of being the confidante of the pupils and an interceder between them and the man teacher.' The solemn author of the little book immediately proceeds to the sixth aphorism, which he takes from Schefer. It runs as follows:—'Beautiful men ought to be chosen as teachers, just as, among the Persians, the king had to be the most beautiful man in the nation. Personal attractions, by their mere presence, convey lessons without words.' It never occurred to the compiler of *Pädagogische Goldkornen* to put two and two together.

Before 1914, Germany had already drifted far from her old moorings of thought in respect of the place of women in national education. But the growing power of militarism during the two decades 1894-1914 had held back what would otherwise have been an inevitable softening of the discipline in the German elementary school. After the war, the influence of women in German education will spread with startling rapidity. The new Germany will find that a new outlook in education is congenial to its needs. Without any sudden breach between the old tradition and the new methods, there will probably be changes in German education which will bring the system more closely into line with that of England and the United States. The new Russia will find itself as much in sympathy with a German education thus tempered and softened as it is now repelled by its imported forms of German educational ideas. In order to hold its place in world thought, German education after the war will have to accept and to put in practice liberal

ideas. And, as coming events always cast their shadows before, it is significant that before the war there were already decisive signs of this impending change.

These signs may be briefly mentioned here. There was unrest about elementary education. The isolation of the training colleges for elementary school teachers was challenged. Demands for the establishment of training departments at the Universities had become persistent and powerful. The claims of the *Mittelschulen*—the intermediate schools with comparatively short courses of study—were pressed on the authorities. The privileged position of the so-called 'higher schools' (the *Gymnasien*, the *Real-Gymnasien*, the *Ober-realschulen* and the *Realschulen*) was evidently not so secure as it had been twenty years before. The higher education of girls had made rapid advance. In other words, democracy and the claims of women were pressing for fuller educational opportunities. And, within the higher schools themselves, there had been a change in the focus of intellectual interest. The old primacy of the classical studies had been impaired. Modern interests had affected not only the curriculum, but also the point of view of the school-master, and the attitude of mind of parents and boys.

To these currents in German educational opinion since the beginning of the war, there is a curious counterpart in England. Here also the great floating docks in education—so huge that to the inexperienced observer they seemed fixed in unalterable positions—have gently moved under the impulse of currents of opinion, noiseless but immensely strong. Before the war, the chief thoughts of educational reformers in England were pre-occupied with the problems of adolescence. The strengthening of the secondary schools for boys and girls, the provision of continuation schools for young people already at work, were the questions upon which the most serious administrative thinking was focussed.

But, after two years of war, the field of national education was seen in a new perspective. The elementary school problem had become the most urgent. Nursery schools, medical care for elementary school children, better payment and prospects for the elementary school teachers, reforms in elementary school curriculum and methods of teaching, had taken on a new significance. Not only in bulk but in national importance, the elementary school problem in all its many-sidedness, loomed larger than in the years before the war. New light was thrown upon the service which the nation must look for from the secondary schools. The latter must be no privileged parterre, the appanage of the comfortable classes, accessible to just a few of the less fortunately born. They must justify themselves as part of a great organism of educational institutions, as members of a vast body, as channels through which a new social ideal could travel in its course throughout the whole of national life. Democracy had changed the educational perspective. Furthermore, the service of women in education had become more prominent, and the economic status of women teachers (and the future position of married women as members of the teaching staffs of elementary and secondary schools) was now one of the chief problems for discussion and settlement. The continuation school question was viewed less as a topic by itself than as a fringe-question of the public elementary schools. The relation of the Universities to the mass of the people, (and especially the conditions upon which the Universities might be entered by students who had not been to secondary schools) became a topic of pressing concern. And, therefore, attention was directed to the intellectual and other needs of the highest classes in the elementary schools, to the value of advanced departments in many of those schools, to the establishment of central schools in town and country—of central schools, that is, which, though not 'secondary' in the technical sense

of the word, form nevertheless a loop line along which some pupils may travel from the elementary school to the University or higher technical schools without entering the 'secondary schools' proper at all.

This change in the centre of gravity in English educational thought during the first years of the war corresponds very closely to what had been taking place in Germany during the same period—an unintentional correspondence, and, because quite unconscious, the more significant. But just as in Germany there was (after a short welcome) a reaction against these new points of view—a reaction partly produced by the extravagance of some of their advocates but more deeply due to instinctive political opposition—so in England after a brief season of apparent agreement, signs of counterworking began to show themselves. Except for an instalment of better remuneration for the elementary school teachers, nothing serious was done to improve the elementary schools. Nursery schools, it is true, were encouraged, but there were no signs of determination on the part of the Board of Education to reorganise and improve the elementary school curriculum, or to develop the higher classes, or to encourage central schools, or to enlarge opportunities for the training of elementary school teachers, or to review the presuppositions of the elementary school tradition in the light of Dr. Montessori's experience. Fundamentally the reason for this apathy is, I believe, an indisposition to make elementary school education all that a free, self-governing nation really requires. This indisposition is partly traditional. In hardly any case is it the result of conscious antagonism to popular needs. But the antagonism is none the less operative for being instinctive and concealed. The necessary changes would cost a great deal. Therefore it is easy to say that in war time the nation cannot afford to make them. But the same excuse was urged before the war when the nation was prodigiously rich. And in

no other field of urgent national need are difficulties of finance allowed at this crisis to prevent costly alterations and extensions. That financial (or Treasury) resistance is strong is obvious. What is equally obvious is that no minister has broken that resistance down, as Mr. Lloyd George broke down similar resistance to the large-scale provision of munitions of war. Half consciously, behind the Treasury resistance, lurks antagonism to the social ideal which is vaguely expressed in demands for better elementary education.

Another factor which has helped in preventing the Government from dealing energetically with elementary education is the denominational difficulty. Let it always be remembered that among the clergy, priests and ministers, are to be found many of the most sincere and experienced friends of elementary education. But if you begin to make drastic changes in the schools, you cannot avoid disturbing a web of administrative concordats which has been woven about our elementary school system, with the purpose of allowing (so far as this is possible) concurrent opportunities for schools which stand for some defined religious belief and its observances and the schools which reflect the rays of the French Revolutionary movement and (whether undenominational or secular) are fundamentally opposed to ecclesiastical management or influence in any form. Now, a great synthesis between these two opposing ideals is possible. But, in order to reach it, each side must give up something, in a large rearrangement of functions and powers. Possibly the time is not ripe for such a synthesis. Possibly the misunderstandings and suspicions of earnest enthusiasts on either side have prevented it from being realised while yet there was time. No one can say with confidence which of these views is the nearer to the truth. But no present statesman dare grasp the nettle. The existing Government passed the word round that in their Education Bill th-

would not raise the denominational difficulty in any shape. An awkward silence ensued, broken here and there by the groans of individuals who felt uneasy at the decision. But the high officers of the Churches agreed to a truce. They would not raise the religious difficulty if the Government preserved the existing balance of interests in the government of elementary schools. The result is that the present Government has avoided any searching reform in elementary education, a decision which has bought immunity from religious controversy (for the moment at all events) but is also in harmony with Treasury desire for the avoidance of heavy expenditure and with the instinctive wish of the present economic regime to refrain from strengthening the forces of the new democracy through a deepening of the intellectual power of the elementary schools. Thus, Church, Finance and the Economic Regime are all in tacit agreement, not in their several social aims but in approving continued neglect of the fundamental reform of the elementary school system. And, at the critical moment, the decision of the Church (like the decision of the Roman Catholic Centre in Germany) gave the signal to damp down what was really most vital in the educational movement which sprang into flame last year in both countries. Let me not be supposed to blame the Church for its decision. In the circumstances it may have been necessary and wise. I know some of the conditions, and think that, at the moment, the leaders of the Church would have done more harm to educational unity in the nation by insisting on raising the denominational question than they could have done good to education itself by refusing to accept the Government's offer of a truce. The Church itself is divided in its educational ideals. In the Church of England, for example, the Archbishops represent no solid block of opinion. They are deservedly influential and honoured but they are like index-fingers upon a dial, quiveringly reporting the inner

pressure of conflicting opinions behind them: By our historical ill-fortune, some of the most ardent advocates of what they believe to be educational progress are blind to the value of the spiritual element in the religious tradition of education. And, if the Church had demanded a thorough-going settlement of the problems of elementary education (and, with it, recognition of the right to claim distinctive religious teaching in every tax-supported school), many zealous educationists on the other side would have exclaimed with horror at the ambitions of the clergy and at their "unappeasable appetite for power" and at their want of patriotism in refusing to welcome harmony and united action in education during the war.

The outcome of these complicated forces is that the Government has not raised the fundamental issue in English education—the one issue which really matters and in which the nation would quickly show its interest—namely 'For what kind of economic and social regime do we intend deliberately to train the younger generation? What kind of life—as citizens, as wage-earners, as individual consciences—do we mean to make it possible for them to live, and to train them to live? What is to be the social and spiritual ideal of our English education from top to bottom?' And it is precisely this issue that the German Government has refused to face—and for pretty much the same reasons.

But the nature of the real force which has prevented the German Government from dealing with the problem is different from the nature of the real force which has prevented our own. In Germany, (though there are many Education Departments in the German Empire, the dominant motive is now virtually the same in all the chief of them) the central and controlling motive is a determination to keep intact military control over civil affairs and policy. In England, the central and controlling motive (operating unconsciously for the most part, and through

personalities which have great claim to our respect) is a desire to preserve the present economic regime which, with all its admirable sides, has one fatal blot, one piece of rottenness at the core, namely, the assumption [that in the business dealings between man and man competition as expressed in considerations of money profit must be given the chief word, because 'business is business.'

Let us not inconsiderately blame the bankers, investors and officials who feel that the first duty of our statesmen is to maintain and enhance what they call our 'industrial and commercial efficiency.' Obviously, we must not enter upon the road to ruin. Obviously, idleness, slackness and ca'canny are bad. But the point really at issue is whether there is not a new economic regime towards which we should with deliberate purpose work our way: a different ideal for which we should discipline ourselves and train the young: a way of economic and civic life which puts its 'profit'—not out of account but out of its central, dominating position: which conceives 'profit' in a larger, more human, and less self-regarding sense: which, in short, aims at correcting the one-sided presuppositions of the industrial revolution (and of the economic regime which has resulted from that revolution) by an infusion of ideals and restrictions more akin to those of the middle ages—but again without accepting the one-sided presuppositions of the mediæval system. Syndicalism plus individual enterprise: guilds plus individual liberty: the Spiritual Power without ecclesiastical tyranny; State action plus corporate life; the recognition of Nationality and at the same time the recognition of Super-National authority. This is the synthesis towards which the world is moving. It is still unformulated, still awaiting the slow fashioning of experience. But it is a real power in the world. Every year adds to its force. And education awaits the leadership which will turn it, con-

sciously, towards the new ideal. The lack of any reference to this fundamental issue makes Education Bills dull, educational propaganda sectional and uninspired, and the English nation cold towards new educational schemes.

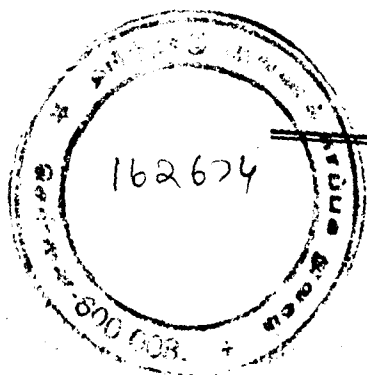
There has been published recently a book which every student of English education should read. It is called 'The Town Labourer 1760-1832'; has been written by J. L. and Barbara Hammond, and is published by Messrs. Longmans. It is brilliant in its assembling of historical facts: masterly in its spiritual interpretation of them. Its authors see the truth and have had the courage to tell it out forthright—the true Truth which is a resultant of many different truths. To read the book is to learn how to diagnose the central disease of modern England—a disease which will not be fatal if after the war our young men and women apply to civil problems the courage and determination with which they have set themselves to the task of military organisation and endeavour. Once laid bare, the mischief which spoils the present economic system will be less dangerous because there will be a determined effort to put a stop to it. And putting a stop to it will not involve, necessarily involve, violent revolution, but quite inevitably a change of spirit; a new attitude of mind; a new scale of values; a readiness to weave old and new things into a fresh pattern; respect for what is good in the past and ardent faith in the possibilities of new ventures of the spirit; patience and boldness; and, not least, an eager use of education as a means of training the young generation for a new way of life.

But the lists are not yet cleared for this great combat between the old economic regime and the new. Here and there, however, one sees signs of its coming. On September 3, one of the most representative of Lancashire men, Mr. John W. McConnell, the Vice-Chairman of the Fine Cotton Spinners and Doublers' Associa-

tion and Chairman of the new Research Association for the Cotton Industry, wrote a letter to the *Manchester Guardian*, deprecating parts of Mr. Fisher's Education Bill and especially some of his aspirations for a finer intellectual outlook in our elementary and continuation schools. Mr. McConnell closed his letter with these significant words: "So long as we confine our discussion to the question what educational system will best promote our commercial and industrial efficiency, we are on solid ground. But, in regard to citizenship, to training for higher enjoyment of life, and so on, it seems to men of ordinary abilities that no such certainty of result can be assured as will justify compulsion." In short, Mr. McConnell conceives of national education as a buttress of the existing economic regime, and as a means of extending the latter's conquests and of assuring its continuance. He sniffs at a conception of education which aims at preparing boys and girls, men and women, for a way of life that will attain something far higher and more satisfying to the body, mind and conscience. He is one of those who, unconsciously for the most part, are ready to spend money on education if it pays the existing economic regime. His predecessors were hostile to popular education because they thought it would interfere with the interests of the regime. The supporters of the latter have shifted their ground. Perhaps they are too late. The economic regime, under which we still live, had the

chance for forty years of developing scientific research and industrial training. It missed the opportunity. Now, when the clock is striking for the change, its supporters wake up and propose to take over and use the system of national education. Is it too late?

Perhaps not. At any rate there are powerful official influences at work in this direction. Great attention is being paid to the secondary schools as recruiting grounds for the civil service and for industry. Industrial research is boomed. State money is pressed upon the chief industries for the establishment of trade laboratories under trade control. Hurried steps are being taken to establish what is virtually a State examination for secondary schools. Representation on the Advisory Council which will supervise this examination has been long refused, and now but reluctantly conceded, to the spokesmen of elementary school experience. And the Government propose under the influence of Lord Haldane, to set up new Provincial Authorities, independent of the County and County Borough Councils, for the special guardianship of secondary school and University questions. These new authorities, if established, will side track and virtually replace (in matters of secondary and higher education) the existing Local Authorities, through which the new movement in social questions is likely to show itself first—in forms however inconvenient and in words however ill-judged.



MS. 12.13