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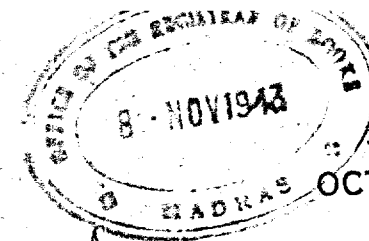
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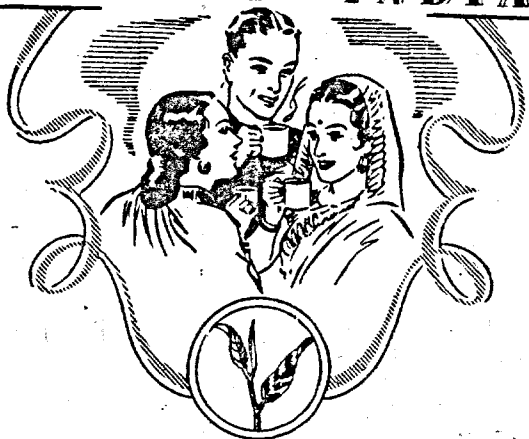
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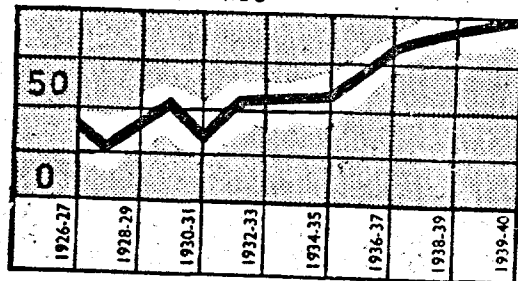
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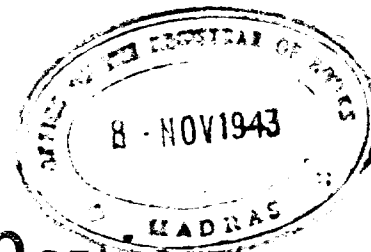
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The Educational Review

A MONTHLY RECORD FOR INDIA

VOL XLIX

OCTOBER 1943

No. 10

AN INVESTIGATION INTO CERTAIN ASPECTS OF THE TEACHING OF ENGLISH IN THE NEW INDIA*

By SRI SHUKDEVA THAKUR, B.A. (HONS.), M.ED., Headmaster, Buxar High School, Buxar

CHAPTER VIII

CURRICULUM OF STUDIES

WE have already outlined the philosophy which should guide us in doing the English part of our language work in the secondary school. Here I shall very briefly touch upon certain broad principles of curriculum construction and shall then outline my suggestions for the improvement of the courses of study in English, of the Patna University, for pupils of the age-range 12-16 corresponding to classes VIII-IX and X-XI in Bihar.

In the first place we should not confuse the intrinsic value of the study of English language and literature *i.e.* study for its own sake or as an ultimate good and the instrumental value of this study, *e.g.* for international contact or for obtaining lucrative appointments etc. Secondly the language programme of the school should not be viewed as an aggregate of different interests but as an integrated unified whole for the child's fullest creative self-expression, through the mother-tongue, with every other part of the schooling constantly helping towards this objective. Thirdly the contents

of text books and materials for composition and lessons must be such as would ensure "a permeating social spirit" among the children. And, fourthly, the courses of study and the syllabus should be flexible and capable of revision, in the light of fresh experiences as frequently as necessary. The educationists who replied to my questionnaire express themselves differently on this point. It is urged that to ensure a proper standard, increased stress should be given to the different form of writing exercises now in vogue, including dictation, and oral expression in English should be greatly encouraged. Others contend that "so much of the pupil's day being taken up with reading and hearing his mother-tongue, extra time will be necessary to ensure the proper standard of English". According to the B.T. syllabus of the Mysore University, quoted by an esteemed correspondent, the Matriculation curriculum in English there provides for 'Comprehension', 'Expression', and even 'Appreciation, linguistic as well as aesthetic'. A distinguished professor proposes to limit the English syllabus strictly to 'current

1. J. Dewey—Democracy in Education (1937) p. 415.

* Report of an Investigation accepted by the Patna University as part of author's qualification for the M. Ed. degree (1940).

English prose' and to exclude all prose, and poetry of the 18th or 19th centuries, while an experienced Principal of a College suggests that English literature should be a distinct subject of study. But the one thing in which all agree is that the range of study in English should be widened, and there should be much greater emphasis on extensive reading of easy extra books outside the prescribed text. In this connection a reference to the courses of study, in English, of the national schools like the Gurukul Kangari, the Viswabharti (Shantiniketan, Bolpur) and the Jamia Millia Islamia, where English is taught definitely as a second language, is instructive. Much of their syllabus in English consists of the usual study of prose, poetry, grammar, composition, conversation, translation, letters, essays, paraphrase, substance etc., etc. It could hardly be otherwise in the most 'national' of schools in a country where the foreign language holds such sway in the scheme of values, if the relating of the school to the life of the people were aimed at in the least degree. There hardly appears to have been drawn any conscious distinction between the expressional and impressional aspects of work, and indeed there is so much stress on the expressional aspects in some of them—for they even teach systematic 'recitation', 'drama' and 'dramatic readings' in English—that the only possible explanation of their claims may be that a firm grounding in their pupils' mother-tongue has facilitated the better learning of English in those places. What is of peculiar interest to us in their syllabus is that without exception all of them emphasize wide reading of books outside the prescribed or recommended lists, thus showing in no uncertain way that there is a grand agreement among expert educationists working in State Schools and the pioneers in the field of national education that to help our children to cultivate the type of ability in English that it is necessary to acquire in contemporary India and to get over the linguistic ailments commonly found

in their work, the best instrument is the wide extra reading of English books. In this particular respect, the syllabus in our own province shows a rather niggardly spirit in as much² as Rapid Reading finds no place in classes VIII and IX and only 1½ hours are allotted to such an important work in classes X and XI. The handwriting of our children in Bihar is much below the average level both in Hindi and English,—a fact which was glaringly revealed in the co-operative enquiry that we, the students of the M. Ed. class of the Patna Training College, conducted in 1939 in preparing a standardized objective scale of Hindi handwriting. Secondly, therefore, handwriting, penmanship and writing to dictation both for their ultimate and instrumental value, should be made a compulsory subject up to the end of class XI, specially as without such provision, English handwriting will degenerate in view of the loss of opportunities for writing English in class notes and examinations in all subjects; the one I consider to be a genuine loss necessitating effective safeguarding. Thirdly, in the place of exercises like composing a dialogue etc., there should be more of things like filling up the M.O. forms and so on. Fourthly, a few lines of good poetry should be set in every class for being committed to memory as a training in recitation and as basis for later appreciation, as a counter-attraction against the old evil of cramming and as providing a legitimate field for a virtue in the exercise of which the typical Indian student takes keen delight. Fifthly, the healthy practice of demanding treatment of unseen passages, should be restored and questions under this head set in such a way as to baffle all possible attempts by makers of books like 'Five hundred unseen passages'. Sixthly, the heaviness of the syllabus and the bulkiness and price of textbooks should be reduced and their quality should be greatly improved. When I speak of the quality of textbooks,

2. Curriculum for classes I to XI of Schools in Bihar and Orissa (1936). pp. 30-31.

I mean, among other things, the utility of their vocabulary, the suitability of the subject matter, the intelligibility and the simplicity of the language and the correctness of texts and annotations. The curious mistakes found in the many annotations in the text-books, including unfortunately university publications, leads one to think that most of these compilers (writers) have not had to spend much intellect or labour on their tasks and this brings us to the epidemic of false authors whose menace is increasing in our province every day. The phenomenon is well-known to those in touch with publishing houses and it is not unusual to see the latter's agents moving from school to school trying to purchase or canvass the consent of experienced and well-known head-teachers to allow their names to appear as authors of books or portions thereof, (especially in Essay and Letter books in English) which are being written or more accurately being plagiarized into existence by untrained novices, the unemployed pseudo-educated riffraffs of Patna, in the publishers' ghostly hovels. The other day, when I was looking into a book on Translation (M. to E.) published in the name of a trained headmaster friend of mine, a gentleman, a teacher of mathematics and Hindi, came with a sigh and ejaculated: "After all, the parents feel delighted in seeing their child prosper, under whatever assumed parenthood it be." He had written the book which had been published under another's name. This gave me a clue to the explanation of the peculiar errors in the hints given in the lessons. Seventhly, the only way of ensuring the good quality of textbooks, in all subjects in general, is that the Textbook Committee should be suitably reorganised. At present the Bihar Textbook Committee is something like an automatic machine which with its magical powers indiscriminately makes honoured authors and expert reviewers out of quite indifferent graduates and really fights shy of true authors who have any real independent work to their

credit. Eighthly, the Department should ascertain definitely through the Inspectorate, every year, whether the accepted syllabus in English is actually followed in classes VIII and IX and whether the reformed methods of teaching English are actually employed in day to day work and should insist, on pain of deduction of grant-in-aid and withdrawal of recognition, the employment of these rational methods at all stages. The present method of inspection is no good in this respect and the mere provision of a minimum of two trained graduate teachers on the staff does not, I know, subserve this end. Ninthly, in every class at the secondary schools, the syllabus should provide for compulsory annual inspection and cumulative marking on the yearly promotions, of all written work, including handwriting copybooks, duly signed by the teacher and the due consideration of the same in judging the ability of boys in English. Tenthly, the syllabus should provide for and encourage experimental courses in English, different from the prescribed courses of study, which individual schools or headmasters may wish to enter upon, provided that the details of the plan have been worked out with expert knowledge, the future of the plan has been clearly kept in mind, the school has proper equipment for undertaking the work and on these bases previous permission of the department has been obtained. And lastly the syllabus of English must cater for the emotional, moral and intellectual needs and tastes of the Indian child.

An enquiry was conducted into the relative popularity of particular kinds of books in English and in the mother-tongue among scholars of classes VIII to XI and the results which are tabulated below show in some measure the likes and dislikes of our children. A questionnaire, in the form of a printed chart containing columns for a fairly complete numerical analysis of records of school libraries and seminars, was circulated and a random sampling was

obtained by addressing some unselected schools from amongst Government, aided and private schools. The books in the mother-tongue were also included in the survey for purposes of comparison and schools were requested to enter in the proper columns the total number of books issued to boys, during the period April 1938 to March 1939. Seven (5 high and 2 middle) schools responded and though the enquiry suffered from the usual limitations of the questionnaire method (the ideal method would have been to select extracts and books of all kinds and ask a large number of boys to state their preferences—there was no time for this) the representative character of the responses and their points of essential similarity make for a sufficient diagnostic value in the results.

The figures in brackets in table VI indicate the total number of books issued to boys under each head in English and mother-tongue and the Roman numerals show the preferences. For purposes of generalisation the two upper classes have been taken as one unit and the two lower classes as another. The preferences which roughly tally in both units, in English, are, in order, fiction; books on travel, exploration, and discoveries; books on Indian topics; biography; history; drama and dialogues etc; poetry and pictorial books. The other items whose position does not at all tally in the two units have been left out. This result is largely natural and in accord with the well-known psychological traits of adolescent children. English drama, dialogue and poetry come low in the scale because of their foreign background and consequent unintelligibility; it may be also due to lack of proper guidance and encouragement. The clue to the low position of pictorial books lies in the notorious paucity, in our schools, of suitable pictorial literature, good foreign and Indian publications on the subject being rather costly and in the teachers' lack of taste in and ignorance of the value of such literature. The preferences in the mother-tongue, on the same

TABLE VI
Relative popularity of different kinds of books in English and the mother-tongue.

No.	Classes	Subjects	Poetry	Fiction	Travel	Tales	Humour	Indian topics	Drama	Hygiene	History	Geography	Reference	Pictorial	Poetics etc.	Biography	Biblic etc.	Essay	Religious	Others
1	VIII	Mother tongue	II (130)	I (195)	..	IV (107)	VI (18)	..	VIII (3)	VII (17)	..	..	..	VIII (5)	..	..	..	III (102)	V (39)	113
2	IX	English	VIII (5)	I (49)	III (53)	II (85)	..	V (35)	VII (9)	VIII (4)	VI (15)	X (3)	..	XI (2)	XI (2)	IV (51)	X (5)	..	..	33
3	X	Mother tongue	I (164)	II (195)	..	IV (102)	VII (10)	..	VI (26)	VIII (5)	..	..	..	..	VII (10)	..	..	III (146)	V (32)	41
4	XI	English	X (14)	I (197)	III (57)	VI (35)	XII (5)	IV (50)	VIII (19)	XI (7)	V (47)	VI (35)	VII (21)	XIII (2)	VIII (19)	II (31)	IX (15)	..	..	56

basis, are—fiction and poetry; essays; children's tales, tales of adventure etc: religious books; Humorous sketches; drama and hygiene; politics, nationalism etc; and pictorial. The columns for the mother-tongue which are blank in both units indicate that information was not sought under the head as the enquiry regarding the mother-tongue was not intended to be exhaustive. The preferences in the mother-tongue are again very largely indicative of the true tastes of adolescence. The high position of poetry and essays in the mother-tongue vis-a-vis the low position of English poetry clearly shows what difference it makes for young folk to read poetry in a foreign tongue, and from my own experience supported by these eloquent statistical proofs, I would urge strongly the inclusion in our poetry selections of a large number of good poems written by Indian and foreign writers on Indian topics which will have a sure appeal to youngsters. The high place attained by religious books hints at the study of books like the *Ramayan* which are religious and literary at the same time. Pictorial books share the same fate even in the realm of the mother-tongue and undoubtedly for the same reason as in English, though to a greater extent. But drama makes strange company with hygiene for there is no dearth of good dramas either in Hindi or Urdu now,—the only explanation of its low place seems to be in our shameful neglect of the mother-tongue and the adolescent's natural eagerness to hide their feelings about particular types of books

which they like but which they fear do not find favour with the adults, while the large accretions under the head 'others' show the difficulties of classification, some real and many, no doubt, due to laziness and want of proper training for librarianship.

Analysing the figures a little further and taking 40 as the average of the number of boys in each of the 4 classes of the 5 responding (high) schools (this is for reliability, though I know some of these classes are duplicated and triplicated), we find that during the year 1938-39, on an average each scholar read only 1.38 book in English, 1.83 in the mother-tongue and only 3.22 books in English and mother-tongue combined, outside the limit of prescribed books. If this is the result of so much departmentalisation of instruction (and the figures are very reliable because of the margin given) and so much vaunted training of teachers, no wonder the average educated Biharee's Hindustani speech is crude and he fumbles for expressions in drafting the merest application.

The curriculum³ should be scrutinised in the light of these suggestions and necessary changes should be made to bring it in tune with the needs of the new situation and to give to the young the food that will appease their soul's hunger.

(To be continued.)

3. Curriculum for classes I to XI of Schools in Bihar and Orissa (1936). pp. 30-31.

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SOME ASPECTS OF THE NEW EDUCATION

BY SRI T. V. VENKATESWARA IYER, B.A., B.T., Chittur—Cochin.

EDUCATIONAL systems of a country must reflect the traditions, characteristics, and aspirations of that country. Each country has its own national problems. Education is the foundation of national prosperity. The prosperity and well being of a country does not consist in currency or in palatial mansions but in the brains and bodies of its people. At present our Education has no relation to our national life. To be Indian in character our Education must have a close relation to the cultural and economic life of our people. It must awaken national consciousness and national unity. "New times demand new measures and new men." For this there must be a Revolution in Education.

The twentieth century has been called the century of the child. Education is concerned with the welfare of the child. The welfare of the child depends on his ability to adjust himself to a rapidly changing world and to take his share in the control of his environments. The present examination-preparing philosophy has done much harm to the century and it must be replaced by a new and better philosophy. We must change our outlook on life and consequently our philosophy of education must also change. Sir S. Radhakrishnan says: "The general outlook upon life in India as things are now, is too gloomy to permit sound individual or social development. Far too common is the belief that life is merely a transitory stage in the passage of the soul to another world. That notion chills enthusiasm, kills joy and promotes fatalism." In the words of James Harvey Robinson: "We must undertake the arduous task of reconsidering a great part of the opinions about man and his relations to his fellowmen. We have first to create an unprecedented attitude of mind to cope with unprecedented conditions and

to utilize unprecedented knowledge." The wave of democracy is now sweeping all over the world. The foundations of democracy must be laid in schools. The school should be the bed of the national culture. The thoughtful persons who are concerned with the future of the country must consider this question. The duty is one concerning the home, the school and the state. No one of them can assume the whole responsibility. Co-operation of social efforts are necessary.

"Modern education must fit modern children into modern world and this is exactly what Indian education does not do to day." H. G. Wells remarks: "We are witnessing a race between Education and Catastrophe." The task of Education is to harmonise man's individual and social progress with the changing conditions around him. The problems can be solved by friendship and co-operation. The objective of the New Education can be summoned up in one word, Co-operation. "Co-operation with life and co-operation with others." The development of modern science through the principle of "tested thought" has changed the outlook of men. The growing industrialization all the world over has brought about a change from nationalism to that of inter-nationalism. The complexity of life and the democratic tendency demand a new disposition. With the recognition of the social changes in life, leaders of educational thought require development of qualities—physical, religious, civic and moral.

A changing world demands a changed policy. There must be a deliberate overhaul and reconstruction. The final objective of the New Education should be a continuous operation in which 'bread-winning and soul-saving' should be harmonised. The world has always been changing and will

continue to do so. The old theories must be replaced by new ones adapted to changing conditions. We have to acquire the power to adapt our attitudes to meet the changing conditions. The main purpose is to secure the effectiveness of the individual as a social unit in the changing conditions of the world. At the same time "the ego must be given his own." The New Education must produce "people whose bodies have been liberally educated to correspond with a liberal education of the mind and to support it at every point; the eye trained to see beauty and to value it, the ear trained to hear harmony and to resent discord, the hand trained to a fine craftsmanship, the whole man, mind and body together, to creative activity—along the lines of the True, the Beautiful and the Good."

"The fair mind in the fair body will be the fairest and loveliest of all sights to him who has the seeing eye." The physical education of the child is the basis upon which his mental education is founded. Swami Vivekananda once said: "What India needs to-day is not the *Bhagavadgita*, but the football field." Games and athletics have a wholesome effect on the physical, mental, moral and social development of the individual. The sports ground is said to be the cradle of democracy. The Duke of Wellington is reported to have said that the "battle of Waterloo was won on the play-grounds of Eton." The importance of physical education was recognized by Herbert Spencer who once said: "To be a good animal is the first requisite to success in life, and to be a nation of good animals is the first condition of national prosperity."

Burton says: "Religion and education are natural allies." From the historical point of view also the association between religion and education is very old. In the West the church has been the agency for the education. In the East also education was throughout the ages provided under religious auspices. Yet, the British educational system in India is regarded as

'Godless'. The State adopted a policy of neutrality towards religious education. Perhaps they might have understood the truth of the remark of that great writer, Swift, when he remarked: "We have enough religion to hate one another but not enough to love one another." Mahatma Gandhi justifies the omission of religious instruction from the Wardha Scheme, saying: "Religious instruction in the sense of denominational religion has been deliberately omitted. Unless there is a state religion it is very difficult, if not impossible, to provide religious instruction as it would mean providing for every denomination. Such instruction is best given at home." But on account of the present complex conditions of life the home is not a fit place for religious instruction. Hence the leaders of different religions should find a way of imparting religious instruction without attacks on any religion.

The present age is an age of propaganda. All the means available such as the press, the platform, the radio and the cinema are used in spreading set views. By these means, independence of thought, freedom from bias and intelligent understanding of the various problems of the present day are very much affected. It is seen that people talk glibly about what is right and what is wrong and yet remain depraved in conduct. Mere knowledge therefore is not enough. What is required is the creation of permanent emotional attitudes and sentiments working for the welfare of society. Civic and moral instruction can do a great deal in the right direction. "Opinions alter, manners change, creeds rise and fall, but the moral law is written on the tablets of eternity. We learn in it to sympathise with what is great and good. We learn to hate what is base." At present Indians are in need of mutual toleration and goodwill. National life becomes tainted with intolerance and the country has little chance of healthy growth. National leaders should psycho-analyse themselves and work for the purpose of

national regeneration through goodwill and co-operation. Education must be based upon the principles of national solidarity: Moral and civic instruction should inculcate modest and balanced patriotism and it must be harmonised with internationalism. The convocation address of Sir Mirza M. Ismail to the graduates of the Nagpur University is very inspiring in this direction. He pleads for social and political compromise. "Lajpat Rai has said: 'If Mother India is proud of a Nanak, she is also proud of a Chisti. If she had an Asoka, she had an Akbar too. If she had a Chaitanya, she had a Kabir also.....Even we modern Indians can be as well proud of a Hali, an Iqbal, a Mohani, as of Tagore, Roy and Harish Chandra. We are proud of Syed Ahmad Khan as of Ram Mohan Roy and Dayananda.'"

The address delivered by Diwan Bahadur P. Venkataraman Rao at the convocation of the Madras University dwells mainly on the new world order that is bound to emerge from the present world war. Defining the conception of the New World Order Mr. Venkatarama Rao said: "In the architecture of the new world, we reverse the principle of the old. We begin with the conception of world society and go down to the nation..... We must make the world consciousness and unity permanent terms of our thinking and basic factors of our social life." In the new education

emphasis should be laid on the higher values in moral ideals. In place of violence there must be love and persuasion, service and sacrifice, 'co-operation and co-ordination.' The future of civilisation depends upon him. The new education contemplates a new character. The new character relates to the new culture and civilisation. So "the agencies of education should be in *rapport* with the ideals of the new culture and civilisation and not be out of tune with them." The new education should make the individual a new man who will be free and who will cease blindly worshipping the past. The new life has to be pictured from a new perspective. Hence as has been pointed out already there must be a Revolution in Education. This is a call for fresh Orientation of Education.

India will be India only if she is educated in her own way. "The pivot of the New Education is the New Teacher. It is he that must not only link up the generations but also India's past with India's present and India's future and India with modernity." What the new education should do is summed up in the following lines:—

"You may give them your love but not your thoughts,
For they have their own thoughts.
You may house their bodies but not their souls,
For their souls dwell in the house of to-morrow,
You may strive to be like them
But seek not to make them like you,
For life goes not backward nor tarries with yesterday".

HINDU CONTRIBUTIONS TO LEARNING AND CULTURE

BY SRI K. VISWANATHAN, *Bansda.*

THE literature of the Hindus contains philosophical thesis, poetry, drama, and fables which excel those of Aesop, and a variety of treatises on the different branches of art and science. No branch of art or science was left out. The Jatakas, the Upanishads, the works of Kalidasa and

Bhavabhuti, Bhaskaracharya, Brahmagupta and others provide illustrations of this.

In the whole world there is nothing to equal, much less to excel, the Upanishads in original thought. Some wiseacres may say that this is all imagination, nonsense, puerile and so on. Schopenhauer says of

the Upanishads that they "have been the solace of my life and they will be the solace of my death." What sublime thoughts human mind can reach is seen if one reads them.

In classical literature Kalidasa provides a fund and a rich variety rarely excelled. There is a host of others after and even before him.

The American movement of transcendentalism which produced an Emerson owes not a little to Hindu philosophy; Sankara's words are the last say therein. Nothing was recognised in Hindu philosophy which did not come out of absolute reality. It is this and the various tenets taught by it that travelled to foreign countries and drew the admiration of the world.

Taking some of the exact sciences we see that the Hindus were the pioneers and fore-runners of many of the branches of the latest knowledge. In mathematics the Hindus of yore were the pioneers. Brahmagupta was the first to recognise the existence of the negative formula and the inventor of the quadratic equation. The arithmetical thesis of "Bharata," the astronomical wizard, is incomparable. Aryabhata is an equally famous astronomer. The *Suryasiddhanta* is still unrivalled in that subject. Varahamihira is a celebrated astronomer of the first century A.D. and is the author of *Brihat Samhita*. The Greeks were almost outrun by Bhaskara when he gave his theory of square roots. On the discovery of zero, the offspring of the genius of Bhaskara, rests the theory of mathematics. While the Greeks were satisfied with one solution in mathematics, the Hindus endeavoured to find all possible solutions. The cyclic method is the invention of the Hindus.

The grandest feat in mathematics that the Hindus did was the perfection of the decimal system of numeration, which is acclaimed as a great achievement.

In chemistry Hindus had their part. Hindu genius showed itself when the black

sulphide of mercury was prepared in India 400 years before it was known in Europe. *Sindhur* and *makaradhwaja* were the two exclusive recipes of Chakrapani Datta. Susruta gives a number of formulæ for the preparation of various chemicals. Glass-making, pottery, heavy chemicals, purification of sulphur, extracts and liquors, organic preparations, were all known to the earliest Hindus. The latest theory of atoms and electrons was anticipated by the ancient Hindus. Metallurgy was known to the Hindus as can be seen from the number of formulæ given for the purification of ores. The proficiency attained by the Hindus in chemistry can be seen from the Iron Pillar at Delhi which has stood the ravages of weather for over 10 centuries, and which even to-day is a marvel to many of the Western scientists. The Indian steel was world-famous in ancient times. It was so famous that Porus presented steel to Alexander.

Medicine too claimed the care and attention of the Hindus. No country has attained the proficiency in medicine that ancient India had in spite of the vast evolution of science. Vagbhata and Charaka are the two important Hindu works on medicine. Sir William Hunter says in *The Indian Empire*: "The works of the great traditional Indian physicians, Charaka and Susruta, were translated into Arabic not later than the 8th century (p. 149). Both appear as Brahmins; Susruta being, according to tradition, the son of the sage Viswamitra; and Charaka of another 'Veda-learned Muni' (p. 131). Unlike the astronomical treatises of the Brahmins, the Hindu medical works never refer to the *yavanas* or Greeks, as authorities; and with one doubtful exception, they contain no names which point to a foreign origin. The chief seat of the science was at Benares, far to the east of Greek influence in India. Indeed Indian pharmacy employed the weights and measures of Provinces still farther to the south-east, namely, Magadha and Kalinga. Arabic medicine was founded on the transla-

tions from the Sanskrit treatises, made by the commands of the Kaliphs of Bagdad, 750-960 A.D. European medicine, down to the 17th century, was based upon the Arabic; and the name of the Indian physician, Charaka, repeatedly occurs in the Latin translations of Avicenna (Ibn Sina), Rhazes (Al Rasi), and Serapion (Ibn Senabi). Indian medicine dealt with the whole area of the science. It described the structure of the body, its organs, ligaments, muscles, vessels and tissues. The *Materia Medica* of the Hindus embraces a vast collection of drugs belonging to the mineral, vegetable and animal kingdoms, many of which have been adopted by European physicians. Their pharmacy contained processes of preparation with elaborate directions for the administration and classification of medicine. Much attention was devoted to hygiene, to the regimen of the body, and to diet.

Surgery was also equally advanced. The Hindu used different kinds of surgical instruments. Of forceps alone they had twenty varieties. Six types of operations were so performed. Amputation, trepanning, craniotomy, lithotomy etc., were all known to and practised by them. Plastic surgery is the latest development in modern science and is the boast of Western doctors. This was known to the Hindus. Ear and nose troubles were cured by plastic operations. Fractures were treated. During the regimes of Chandragupta and Vikramaditya there were more charitable dispensaries in India than anywhere else while the earliest hospital in Europe was only opened in the 17th century.

I again quote Sir William Hunter, "The surgery of the ancient Indian physicians appears to have been bold and skilful. They conducted amputations, arresting the bleeding by pressure, a cup-shaped bandage, and boiling oil. They practised lithotomy, performed operations in the abdomen and uterus; cured hernia, fistula, piles; set broken bones and dislocations; and were dexterous in the extraction of foreign substances from the body. A special branch

of surgery was devoted to rhinoplasty, or operations for improving deformed ears and noses, and forming new ones; a useful operation in a country where mutilation formed a part of the judicial system; and one which European surgeons have borrowed. It is practised with much success in the Residency Hospital at Indore, Holkar's capital; as jealous husbands in Native States still resort, in spite of more humane laws, to their ancient remedy against a suspected or unfaithful wife. This consists in throwing the woman violently down on the ground and slashing off her nose. I have seen a woman in hospital under process of new nose-making, and other successful example of the operations when completed" (*Ibid* pp. 149-50).

Beautifying cosmetics and operations were numberless. The French beauty saloons will appear pigmy before the methods of the Hindus. It is a well-known fact that the Roman emperors considered the Indian perfumes and cosmetics more refined, more costly and more luxurious than those of their own country. *Dhupa*, *lepa*, *alk-taras*, *phenaka* etc., are items in the Hindu toilet. Various twigs were and are used for cleaning the teeth and for oral hygiene. Mouth odour was prevented by many preparations. In addition a large number is described of dental preparations and suitable vehicles, which have successfully stood the test of the present-day scientific development. Bathing was at once an art and a science with the Hindus. Deodorants and checking perspiration are minutely described; musk, camphor, sandalwood, nagapushpa, agar-agar were powdered together and applied on the body.

Various perfumes were used for the fragrance of the body and clothes.

Phenaka means "lather-producing agent," i.e., the modern soap.

A study of the various books like *Gandhadipika* of Sarangadhara, *Gandhayukti* of Ishwar, *Brihatsamhita* of Varahamihira gives accounts of the art of hair cosmetics

deodorants, preparations for perfuming houses, facial cosmetics, bath preparations, massage creams, incense sticks etc. The modern talcum powders were not unknown to the ancient Hindus who prescribed various *churnams* to be applied to the body in summer.

"The art of enflourage, as known in Europe, was thoroughly put to commercial use in India thousands of years ago and is still being followed in some places on the same lines. For this purpose, sesame seed is given a number of washings with flowing water till all the extraneous matter and colours are thoroughly removed. These well-washed seeds are then treated by the process of enflourage with fresh flowers of jasmin, rose, and kewda every day till the desired saturation of perfume is attained. The seeds thus aromaticised with natural flowers are cold pressed in oil mills of wood, preferably made of sandal. The vegetable oils pressed in this way are decanted for sometime, when a golden coloured, crystal-clear liquid separates out. These hair oils, though costlier than the synthetic preparations, are prized for their cooling and beneficial properties to the scalp and for high-class aromas.

"Baldness was removed with powders of gunja fruit (*Abrus Precatorna*), honey, and well-burnt ivory in sesame oil. In Vatsyayana's *Kamasutra*, various prescriptions are to be found for the hair dyes."

Depilatories, salves for eyes and eye lashes, cold creams, snows, rouge etc., were all described. All sorts of cosmetics from head to foot were in vogue; space forbids my describing them at length. The art of beautifying the body, giving a velvety shine to the skin was perfected to a science by the Hindus. Hindu manicure was complete.

Dress, jewellery, adornment, personal appearance were in excelsis with the Hindus. The Dacca muslin is still famous.

It can be said that Hindu music is one of the oldest extent in the world. The complete system of notes existed in India many centuries before music was known anywhere else. Musical notation was also in perfection long before others thought of it. To day no music captivates any one as the Hindu music. Of western music it is said that the Italian is the best. And Italian music comes very near Hindu music. All grades, varieties and types of music are available in the Hindu. Eroticism (which is closely allied to music, beauty and sensation) too was not neglected but perfected as can be seen from many of the extant works.

In cookery and hygiene, the Hindus can any day easily beat any nation of the world. As a matter of fact there is hardly a corner of the world where one or other of the Hindu recipes is unknown. Social hygiene, corporate life, civic responsibility, a sense of honour, magnanimity, etc., have not been shown by any other to the same extent as the Hindus. India's greatest contribution to the world was its lofty philosophy. The peaks of sublimity of Indian philosophy were Himalayan in height.

Sculpture might not have been what it did in the West. But the huge bull carved out of one rock at Sravanabelagola, the topes at Sanchi, the rock cut caves and temples at Ellora, Karla etc., are monuments which arrest the attention of the whole world.

In archaeology, no part of the world can boast specimens as old as the Indian ones nor so numerous. For painting, those at Ajanta are a marvel to all the world and many wonder at the colors and chemicals that must have been used to withstand the effects of weather for several centuries.

"The ryots of India," says Sir Henry Cotton, "possess an amount of knowledge and practical skill within their own humble sphere which no expert scientist can ever hope to acquire." Col. King observes: "The institutes of Vishnu and the laws of Manu

fit in excellently so far as the subjects touched go, with bacteriology, parasitology, and applied hygiene of the West. The hygiene of food and water, private and public conservancy, disease suppression and prevention are all carefully dealt with." A last quotation is from a Governor of a province. "If a good system of agriculture," says Sir Thomas Munroe, "unrivalled manufacturing skill, a capacity to produce whatever can contribute to either convenience or luxury, schools established in every village for teaching, reading, writing and arithmetic, the general practice of hospitality and charity among each other, and above all a treatment of the female sex, full of confidence, respect and delicacy are among the signs which denote a civilised

people—then the Hindus are not inferior to the nations of Europe; and if civilisation is to become an article of trade between England and India, I am convinced that England will gain by the import cargo."

People need not run away with the idea that this is all past—a dead nation's history or relics of a once glorious but decadent civilisation. The India of to-day is by no means bankrupt and has nothing to be ashamed of. If ancient India produced a Sankara, a Bhaskara, Kapila, Charaka, Vagbhata, Susruta, Kalidasa, Aryabhatta, modern India has produced Ramanujam, M. N. Saha, Sir Radhakrishnan, Sir P. C. Ray, Sir N. R. Sircar, a Raman, a Ghose, a Tagore and a Gandhi to name only a few out of a galaxy of brilliant people.

SOME ASPECTS OF ENGLISH TEACHING IN INDIA

BY SRI S. SUBRAHMANYA IYER, B.A., L.T., *Retired Headmaster, Thyagarayanagar.*

THE aspects of English teaching in Indian Secondary Schools are many and varied. To attempt to deal with all of them in a brief essay would be nothing short of marvellous. For purposes of my theme let me restrict myself to some of them, which seem to me important. They are 1. Pronunciation, 2. Grammar, 3. Usage, 4. Punctuation, 5. Composition.

1. Pronunciation.

We could not, even if we would, make an Indian pronounce English as an educated Englishman does. Although the task is formidable, we should not fight shy of it.

The teacher of English should start teaching his pupils how to produce the different vowel sounds by examples from their English texts. They should make up a list of words containing the different sounds of each vowel: *fat, fate, father, fall, a* in 'a book', and so on with other vowels. They should not combine the *y* with the

proper sounds of vowels except that of *u* in *mute, fuel, use*. The other sounds of *u* are exemplified in *but, bull*; *u* is unsounded in *build, rude* (oo).

Pupils may find it hard to pronounce correctly the following pairs of words: *rice, rise*: excuse (n), excuse (v); *abuse* (n), *abuse* (v); *ice, eyes*; *face, phase*; *record* (n) and *record* (v). Nor are most of them heard to pronounce correctly the words: *listen, whistle, hasten, fasten, castle*, where they give the Z sound instead of S. The teacher should therefore impress on their minds the correct sound of *st* by transcribing the words in the ordinary script, as *lisn, fasn, whisl, kissed* (kist) *missed* (mist) and so on. The pupils should understand that a hard and a soft sound should not go together.

There are many words in English which end in *ous, tious, cion, sious, geous*, (jus), and *ous* preceded by *end* or *ent*. The teacher may elicit from pupils such words of which a list may be written out on the

blackboard. Similarly he may also get prepared lists of words, of course, familiar to his pupils, which end in *ate, te* or *ite, at* and *it*. The following examples will bear out my statement *ous*:—Various, mischievous, precipitous, frivolous, miscellaneous, but courageous, advantageous, religious, auspicious, stupendous.

ate; translate, separate, immediate, constitute, annihilate, celebrate, but distribute, rec'ondite, prohibit.

al: practical, political, individual, industrial, (in'dustry) provincial, incidental, accidental, v'isual (vizual), u'sual (uzhad)

Words ending in *ie* and *tion, sion, or cion* are accented on the syllables immediately preceding them. Judging from the above lists, the principles underlying accentuation ought to strike any careful observer. They are as follows: 1. Words ending in *ous, al, ity* or *ty*, and *ical* are accented on the third syllable reckoned from the end, but if they end in *tious* or *cious* or come after *end* or *ent*, the syllables immediately preceding them are accented. In *e'quity, en'tity, adver'sity, prospe'rity*, the third syllables from the end are accented. I trust I shall not be understood as laying down any hard and fast rules on pronunciation; I am only indicating the lines on which certain rules of a general character may be formulated.

Most pupils do not know that *courageous* is a word of three syllables and *advantageous* is a word of four. The noun *advantages* can be distinguished from the adjective *advantageous* only by their respective accents. The noun *abuse* has to be distinguished from the verb *abuse* by the hissing sound of *s*. Pupils mispronounce *sure* in *measure, treasure, leisure, pleasure* as *sher* instead of *zher*. They may be required to give lists of words containing *oo*, with long and short sounds. The words, *food, root, boot*, have long sounds of *oo*, whereas *oo* in *foot, good, book, rook* has a short one.

Lists may also be prepared of words in which certain letters are not sounded: *lamb,*

reign, foreign, calf, talk, hour etc. *Oust* is mispronounced as *oost* and *pronunciation* as 'pronounciation'; every (evri) as 'even', business as biz'nis. Pupils may be trained to suggest examples in all cases, and their resourcefulness and ingenuity may thus be developed.

2. Grammar and Idiom

Next I come to the aspect of grammar and idiom. The two aspects may be combined into one, for they do not, properly speaking, belong to separate categories. Grammatical rules are generally built on usages, and wherever violations of grammar occur, they are pointed out as exceptions under general rules.

Let me give you some examples of wrong usage of grammar which are current even among the educated: thanks very much, to keep good health, how many issues have you, my room is full of valuable furnitures, myself did it, it was me that he called, I want that you should come, I remember you telling me, the tahsildar was kindly requested, quite alright, my wife is carrying, the wrong uses of *come* and *go*, more than one man have erred, I find it to be *he*, you were late yesterday, is it not?, did you not come yesterday?, Yes. I did not come, the answers were in most cases unsatisfactory, the collector is investigating into the matter, the merchant will not forego his profit, he failed due to want of a few marks, a bloody nuisance (vulgar) to call for a meeting and so on. There are other blunders in idiom and grammar which under limitations of time and scope I am unable to enumerate.

While on this subject, I should like to invite the attention of teachers and others responsible for the selection of text-books for pupils. In a manual of grammar adopted in a secondary school in this place, I casually came upon the statement by the author that pronouns used as complements after the verb *to be* should be in the nominative case; and the statement was supported by examples such as 'it is I, who is he'

and so on. I at once feel tempted to put it to you whether you should use *he* or *him* in the sentence, 'I find it to be *he* or *him* that called on you this morning'. The author would have been on his guard, if he had said: "The pronoun used as the complement of 'to be' and the antecedent noun or pronoun should agree in case." Many pupils and half-educated men would say 'to pick up a quarrel' instead of 'to pick a quarrel'. 'Men are allowed to remarry; why not young widows also be allowed to remarry' is written by a member of the I.C.S. in one of his popular essays.

In pointing out the above lapses in grammar and usage, I am not actuated by a carping spirit; my purpose is to make pupils guard themselves against them during their career at school so that in their later life they may be free from blunders.

3. Punctuation:

Pupils should write as they speak. In speaking they pause at places in order to make their meaning clear; this they cannot do in writing in which they have to employ symbols to denote the pauses. In an old edition of the *Madras Educational Rules*, the *Bhagavatgita* of the educational department, a rule runs as follows: "Pupils from the Muhammadan community, girls, and pupils from the backward classes whose parents are so poor that they cannot pay the standing rates of fees are eligible for concession." A headmaster was guided by the import of the rule and not the meaning which the framers of the law intended to convey. He admitted all Muhammadan pupils and girls, whether rich or poor, to concession rates, but not the well-to-do from the backward classes. The then D.E.O. who looked into the records of the school, took exception to his action in admitting all girls to concession-rates reported it to the Director and recommended that the loss of income, which, in his opinion, the Board had sustained as the result of his action, should be recovered from the headmaster's salary. If the chance of an explanation had not been given by the

Board, the headmaster should have suffered a loss. The time for the explanation did arrive, and the headmaster justified his action by saying that the absence of a comma before *whose* restricted the concession only to poor pupils from backward classes, whereas girls and Muhammadan pupils, whether rich or poor, were entitled to concession. The explanation went up to the government, who fell in with the headmaster's view and revised the rule so as to make it plain as a pike-staff. How important a purpose is served by punctuation may be seen from the above incident.

4. Composition.

Next coming to composition, I should not omit to mention that each pupil in the higher forms, say from IV to VI, should have at his elbow a copy of the Pocket Oxford Dictionary and a suitable handbook of grammar and composition in every English class and particularly in the composition period, so that he may refer to them for clearing his doubts as to spelling, and meaning and grammar. The teacher of English should discountenance all attempts at essay-writing without logical arrangement and paragraph division. Pupils should aim at simplicity, unity, and clearness of sentences and paragraphs. The teacher should make it a point to see that each pupil should begin by preparing a skeleton or outline for his essay, indicating all that he is going to say on the subject. There must be at least one paragraph for each theme, and at the lower stages the pupil must attempt short paragraphs. It is no use the teacher's setting his pupils' tasks in essay-writing, if they are to go unvalued.

Letter-writing is an important part of composition. Lessons from English texts may be reduced to the form of letters. A letter should be written in simple colloquial style. Pupils should practise in letter-writing from the 1st form onwards. I should not wonder if a candidate for the B.A. degree or competitor for a high post in government service were required to reduce

one of his essays on set themes to the form of a letter.

The dialogue is another important class of composition in which pupils need to be practised. A story lesson or any other kind of lesson taken from their class reader that may lend itself to being rewritten in the form of a dialogue will serve the purpose. The teacher could thus press into his service as many lessons from the reader as can admit of such transformation.

There is yet another piquant type of composition in which pupils generally take interest. The teacher may start telling his pupils a short story and incidentally question his pupils about further incidents in the story—"what do you think might have happened under such circumstances?" Here the teacher may not content himself with one answer or two; but the question may go round the class inviting different answers, and thus the curiosity or interest of the whole class will be stimulated.

Punctuation is a hand-maid to grammar. We are accustomed to put in a full stop after *Mr.* just as we do after *Jan.* which is an abbreviation of *January*. The full stop in the latter case denotes the omission of the rest of the letters in the word, namely *uary*. Let me give you other examples of abbreviations and set you thinking whether we should insert a full stop after each of them:—*vbs*, *wd* (word) *yd*, *ry*. In these examples the first and last letters of the respective words find place. Is there a need, then, for a full stop before each elision? This is a question says that calls for an answer. The C.O.D.

there is no need. Fowler's *Modern Usage* says, *no*. Some of the modern literary masterpieces would have the full stop; others do not *want* it. To use a modern colloquialism, I would leave the matter at that.

In a manual of High School Grammar which Mr Graham Sutton and I wrote for a publisher in Madras, we recommended the omission on the ground of such abbreviations having both the initial and the final letter. The text-book committee before whom the book went for approval threw it out on the ground that the practice had not been established. We had only recommended the omission, but not insisted on it. The book was approved only after the withdrawal of our recommendation.

A handbook of grammar for middle schools, which is largely used here and elsewhere contains in a specimen letter the following subscription:—"Hoping soon to hear from you, yours sincerely, Ramaswami." Is the sentence complete? The words, 'I am,' before *yours sincerely* are needed to complete the sentence. The pupil must be taught how to fill out the subscription and reduce it to the form of an ordinary sentence: "Hoping soon to hear from you, I, Ramaswami, remain (continue to be) yours sincerely or your sincere friend."

There are other points to which I should have liked to refer but for want of time; I shall reserve them for a fuller treatment in a book which I contemplate bringing out in the near future.

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LIBRARY AND THE EDUCATION OF THE WHOLE MAN

2. INTELLECT AND ITS CULTIVATION

By RAO SAHIB S. R. RANGANATHAN, M.A., L.T., F. L. A., *Librarian, University Library, Madras, and Secretary, Madras Library Association.*

IN the last article we saw that the rate of growth of the quantity of information that had to be carried in memory was so great that the school found it futile to load the memory of each pupil with all the necessary information and that it had to realise that the best it could do in relation to this factor was to train the pupil in the use of what we called 'externalised memory' or reference books organised in a library. This implied the recognition of the library as a new and fourth means of education and of the need for the earlier means, such as the school, to reinterpret their function in the light of such a recognition.

Education as a process of mental development has not only to enrich memory but has also to cultivate the intellect. What is inherited and inherent in intellectual powers can only serve as a starting point. It is for education to develop it to its fullest capacity. Here again imitation plays a prominent part. The family, therefore, becomes the first means of education from the point of view of the cultivation of the intellect also. The functioning of the intellect of parents and other members of the family is inevitably observed by the child and it induces in him a similar activity. This process implies the cultivation of his intellect. Often he gets into discussion with his elders and thereby enriches his intellectual power.

But the potentiality of the child often goes beyond the capacity of the family and he is then regarded as exceptional. The cultivation of the intellect of such a child needs a more resourceful agency than his family. In early society the community amidst which the family lived provided the needed intellectual superiors, by contact with whom the exceptional child could

cultivate his intellect to its very best. Thus the community served as a second means of his intellectual education. The exceptional child gravitated towards those members of the community who could, as it were, draw his powers out. Still the community too was only an informal means of education.

As society grew in complexity, such informal means proved inadequate. The economic and social organisation grew to be such as not to provide enough opportunity for the child to have frequent and prolonged contact with the elders of the family and the community and thereby cultivate his intellect.

Further the field of intellectual interest got progressively widened and variegated. The background against which the intellect of a child could naturally grow was often different from what obtained in the family and the community. The scientific, technical, political, economic and social factors in the environment of a child were so numerous that it often happened that what could interest him and stimulate his intellectual growth was not strictly within the compass of his elders. Under such circumstances, unless he was an exceptionally superior child, his curiosity got stifled and was, so to speak, still-born without leading to intellectual growth. This factor also made the family and the community inadequate for the cultivation of intellect.

The situation demanded the setting up of the formal school as a third and more effective means of education. This was soon found, however, to have limitations of a serious and insuperable nature. The formal school could have charge of education and help the cultivation of intellect only for a

limited period—up to the school-leaving age, say 14 years, in the case of most and a few years more in the case of the few who entered the university. Though the individual was discharged by the formal school or college, his intellect needed further cultivation and indeed the intellectual growth would not stop until senility set in. Thus the individual had again to depend on the informal agency of the society in which he moved. But by this time the specificity of his intellectual interests had become very pronounced and it was more difficult, now than during childhood, to find superiors or peers, contact with whom would help the cultivation of his intellect. He could get the necessary help only if he went far beyond what was within his physical reach both spatially and temporally. He could cultivate his intellect further with ease and comfort only if he could observe and enjoy the working of the intellect of those who had his specificity and were living in far-off lands or had been dead long, long ago.

The only means by which he could do it was to invoke the aid of an institution which specialised in collecting the intellectual output of all lands and of all times and in so organising them according to their specificity that any one could easily find that which would be most helpful to the cultivation of his own intellect. A fourth means of education had thus to be set up and that was the library.

Even though printing was invented five centuries ago and made the reproduction and dissemination of the intellectual achievements of master minds of all variety of specificity ever so cheap and rapid, it was not till about a few decades ago that humanity conceived the idea of so organising printed materials as to become a fourth means of intellectual education for all. Libraries had no doubt existed even during the pre-printing days. But they were then mostly meant to preserve books rather than to push forward their use by one and all. They were even regarded as the habitual resort of unpractical, cranky, bibliophiles.

They had a cold, desolate, cheerless look. During the last fifty years, however, the Public Library Acts of several countries have rescued them from such a disrepute and made them bright, populous places with an inviting halo about them.

Another danger beset them, however, and delayed the full manifestation of their potentiality as a fourth means of education to help the intellectual growth of everybody. Light books which merely entertain and result in relaxation without any help whatever to the cultivation of intellect began to elbow out the serious ones. The issue—statistics got swollen beyond proportion by such light literature. Like weeds they smothered the educative books in book-selection lists. Any attempt to minimise their evil effect was branded as censoriousness on the part of the librarian. *Vox populi*, and not the librarian, should have the deciding voice in book-selection, it was claimed. The janitor-tradition of the by-gone days made common cause with this attack on the library staff and arrested the normal development of the staff-side of libraries necessary to fit them as a fourth means of intellectual education.

We now seem to be just at such a juncture. Library authorities have yet to realise that the primary purpose of a library is neither preservation of printed books, nor the provision of sop to occupy leisure hours but the profound one of acting as a new and lasting means for the further and continued cultivation of the intellect of everybody, picking up that task at the point where the formal school gives it up as beyond its capacity. They have no doubt begun to realise that the mere provision of books is not sufficient but that the books should be organised and arranged i.e., classified and catalogued. But they are yet to realise that they should also provide human agencies to size up readers quickly and accurately and establish contact between them and the specific books with which their intellect will resonate and thereby get cultivated.

In the earlier days, the library staff was recruited as for janitors' and attendants' posts; now they are being recruited as for clerical posts. Their emoluments and status were and are determined accordingly. The library tools like classification and catalogue are evaluated and forged as if unaided readers are going to use them and even there, readers who come to the library mostly for relaxation and occasionally for information rather than for the cultivation of intellect.

The next and impending stage in the evolution of libraries and practices will alter such lingering attitudes. Serious books of all standards and on all conceivable subjects will be collected, organised and displayed. The library staff will be recruited as for educators' posts. The library tools like classification, catalogue and bibliographies will be evaluated by the extent to which they will serve such a staff in helping the cultivation of intellect by one and all. The sharpening of such tools to the highest state of efficiency will not be arrested by the

myth that 'the man in the street' cannot use them and will feel shy of them if they are too sharp. These highly evolved tools will be primarily for the use of the staff to determine the specificity of the books so that they can, without loss of time and without any fumbling, establish contact between the right reader and the right book. The library staff will be neither glorified menials mutely carrying books, nor touch-me-not-type of officials shut up in rooms and hidden by screens, nor rigid pedagogues, but friends and guides of readers who speak their language 'so to speak' and who do not instruct but only remind and show the way with geniality and solicitude.

When this stage is completed the library will prove to be the fourth and the culminating means invented by man for the continued cultivation of intellect as one of the integral elements in the education of the whole man.

(To be Continued)

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GOVERNMENT IN BUSINESS

BY SRI. P. CHENTSAL RAO, M.A., Madras

IT is proposed to review here the changing role of the Democratic State since the beginning of the last century up to now in the economic life of the country and to indicate the part it is likely to play after the War.

During the last century the popular view in England and America was that the State should not interfere with the business life of the community. This view never held ground in Europe where the governments were playing a more positive and active role. The Individualism in England and America was only a reaction upon Feudalism. Government abstained from individual action especially in commerce. Herbert Spencer may be taken as an extreme example of the Individualist School which opined that that government is best which governs the least. Spencer limited governmental expenditure to only two items—public justice and defence. Graduated Income Tax evoked condemnatory language from J. S. Mill in 1861. According to him a graduated Income Tax 'is an unjust mode of taxation and is in fact a graduated robbery.' The men who framed the American Constitution believed generally in 'government by the wise, the good and the rich.' Jefferson preached the virtues of a genial anarchy. The democratic dogma was 'that government is either needless or an evil, and that with enough liberty everything will go well.'

But the theory of *laissez faire* was never adopted in its entirety even during the early part of the Nineteenth Century. In England the first Factory Act was passed in 1819. Towards the last decades of the century communal action tended to grow strong when it was realised that the law of the survival of the fittest, was allowed to have sway under conditions which deprived it of moral value. The policy of *laissez*

faire gave the employers every opportunity to take advantage of the employment of labour on their own terms and subject to no laws but the strictest competition. In an atmosphere of 'devil take the hindmost' civic virtues were rare both in master and man. And Robert Owens are not plentiful in this world in any age. Long ago the Master of New Lanark abolished all 'pauper apprentices', refused to employ children at less than ten years of age, when others were freely working them at less than six years old. The State had to intervene to protect the life and limb of the wage-earners in the factories, mines and pits. Soon a series of Acts, Factory, Workmen's Compensation, Public Health, were passed. The introduction of railways increased the whole sphere of State activity either by raising the problem of State control or State management. In the early part of the present century the State had to face the problem of controlling the monopoly arising either from its octopoid characteristics or from the combination of large scale producers or from exclusive access to certain natural resources. The activities of the State grew consequent upon the growing popular political opinion that the State must be viewed not only as a system for the establishment of Law and Order but 'as a sort of Official Receiver for the bankruptcy of economic or cultural associations.'

The World War I for military reasons necessitated a series of interferences in all the activities of the nation. After the War economic reasons perpetuated the drift towards economic control and protection. England found herself with shrinking markets for her export trade. She ceased to be the Workshop of the World. She was confronted with a permanent slump in her staple export trade. There was great dissatisfaction with the system under which

British trade and industry grew. The need for conscious corporate planning of economic life was felt. Then came the Depression which further impressed upon the American and British minds the imminent necessity to regulate economic forces. It was realised that the economic system should not be allowed to work itself without control. A self-regulating economic system ceased to evoke admiration when it brought about periodically a cessation in business activity and threw millions out of employment or necessitated the burning of crops to bolster up price. The problem resolved itself into a question of choosing a plan and not between a plan and no plan. Though it was no longer believed that great inequality was a necessary condition of productive efficiency and several measures were adopted such as steeply graduated income tax, death duties, inheritance tax and municipalisation of public utilities to reduce inequality there was even among post-tax incomes great concentration of wealth and an alarming inequality of distribution. It was estimated during 1924-'30, one per cent of the persons in England and Wales owned sixty per cent of the total privately owned capital and seventy per cent of the population only five per cent of the capital. In America two per cent of the population owned two thirds of the wealth of America and two thirds of the population one twentieth.

In Great Britain the problem was how to plan economic life without encroaching upon the rights of the individual. In the words of Sir William Beveridge, 'Planning is indispensable. Democratic political institutions too are indispensable. Planning under Democracy is sometimes as unnatural as breathing under water. We have to learn to breathe under water.' An indication in the new belief in control is found in the disappearance of the popular free trade doctrine in Great Britain. 'Protective duties which were abolished a century ago in Great Britain as being excess in regulation was rejected now as being a deficiency in regulation and gave place to Import Quotas and

Import Boards.' International competition was a powerful factor which compelled National Governments to help their citizens against Foreign Governments.

Americans found that they were tolerating for rather a long time lawlessness for the sake of liberty and gigantic enterprises for the sake of creature comforts though these enterprises were responsible for the great maldistribution of wealth with its grave social repercussions. It was increasingly felt that private leadership led America to the Depression. It became apparent that good business may be bad economics, for private business with an eye on profit lost sight of larger and permanent benefits for the whole of the country. It was therefore insisted that business should conform to good economics and that business should be subordinated to an officially recognized social control. President Franklin Roosevelt came out with his New Deal and there sprouted on the American horizon Public Works Administration, National Labour Relations Board, National Recovery Administration, Agricultural Adjustment Administration and all the rest of Roosevelt's alphabetic flotilla. The Supreme Court sometimes stood in the way of centralisation of economic control. The Court took refuge for their action behind the Constitution while Roosevelt said that a Constitution drawn in the horse-and-buggy age was inadequate to solve modern social and economic questions. And many of the judgments against the New Deal legislation are rectified by confessions of error.

The 'Second World War has become mainly an industrial proposition. The essential nature of a total war lies in the fact that the whole of a nation's industry and wealth is concentrated on war effort. The necessity for the mobilization of economic resources and man power has led to a complete control by the State of the money, share and commodity markets of the Nation. Rationing, freezing of stocks and profits, compulsory direction of the available

resources to specified channels of production are some of the measures adopted in war time by the State to have a grip on the economic life of the Nation.

This grip is bound to be there even after the cessation of hostilities when both the victor and the vanquished nations will be bound to give a square deal not only to the soldiers but to the vast army of workmen at home who kept the machinery of ordinary life running in addition to war work during the period of the War. The civilian now is as much a hero as the soldier, for has not the war front extended to his very door and has he not to take heroically the bombing of his home? Henry A. Wallace, the United States Vice-President, the other day said that there was a Second World War because of the failure to realise 'economic democracy will die.' President Roosevelt promised that the New World Order will be built on Four Freedoms and the fourth freedom is freedom from want, which according to Wallace ought to mean (1) freedom from worry about a job; (2) freedom from worry about a poverty-pinched old age; (3) freedom from unnecessary worry about sickness and hunger; (4) freedom from strife between workers and businessmen, farmers and businessmen, and workers and farmers; (5) freedom from strife between races and creeds; (6) freedom from fear of bankruptcy by overproduction; and (7) freedom from repressive Cartels.

Russia is an ideal and beacon light to all except the ultra-reactionary group. Has not Russia grown within a short period of two decades into a world power to be reckoned with? This was possible because of the deliberate planning by the State of the economic life of the Russian community. The Russian State has shown in peace time how to change the shape of a simple primitive economy, how to take care of expectant mothers, young children and old people. It has demonstrated that government can run business as efficiently as private enterprise. In war she is proving her mettle when she

is throwing back the Nazi crack troops from the Russian territory. These are no mean achievements. The excesses of a particular Russian Party should not be pointed out as a blot on Russian character; neither should we detract the value of the achievements of the Party.

Karl Manheim in a thoughtful and penetrating essay titled 'Diagnosis of our Time,' points out that planning can be done on the basis of democratic advice and there is nothing to prevent parliamentary machinery from carrying out the necessary control in planned society. "But it is not only the abstract principle of democracy which must be saved as well as recast in a new form. The increasing demand for social justice must be met if we wish to guarantee the working of a new social order..... But as the working of democracy is essentially based on democratic consent, the principle of social justice is not only a question of ethics but also a precondition of the functioning of the democratic system itself."

There is this imminent danger that the Governments in Great Britain and America alive to their new duties by their citizens may turn a blind eye to the rights of 'undeveloped' countries. Colonies are not deadweights but rich acquisitions notwithstanding the pious sentiments to the contrary expressed sometimes by the 'mother' country. Colonies are very useful to improve the standard of living of the "mother" country. Will America and Great Britain acknowledge the right of every country to work out its destiny without interference from them and from other powerful industrial countries? Tutelage however enlightened and benevolent is a blight on whom the tutelage is imposed. Let the White Man bear the cross in his own land and allow others to bear their burden on their own shoulders. It is only through such abstinence on the part of the powerful and suffering on the part of the 'undeveloped' will individuals and nations rise to the full height of their personality.

It is not idle speculation to suggest what the role of the State ought to be in a Free India, for even according to the British spokesmen it is only a question of time before complete political control is transferred to Indian hands. Besides, what is of significance and importance is that all shades of political thought in India agree that India deserves and is destined to live a free life. It is a historic fact that the will to win freedom cannot be thwarted long. We shall not be content merely with the transference of power from a White to a Brown bureaucracy which may be content to carry out its police functions. We not unnaturally expect the State in a free India to improve the miserable standard of living of the teeming

millions and strive for securing the conditions that foster the greatest economic well being. It is not enough to hope that the State will undertake this and that function in the interest of the common good. If the state is to effect economic regeneration it must take control over the highly complicated modern economic activities. It means in practice that power is put in the hands of a vast army of government officials. The educationists have a big task now before them. They have to train the youth to become dutiful citizens and conscientious administrators who realise that the greater the power, the greater the responsibility, the greater the need for wisdom and restraint on their part.

MARATHI FOLK TALES AND FABLES

BY SRI R.B. PINGLAY, B.A., *Bangalore*

INDIA is a classical land of fables and tales. The Brahmanical texts contain many of them. Buddhism and Jainism made them "the basis of their pious readings and the instrument of their religious propaganda". After the age of the classics, came the the most appreciated of literary compositions. The ancient epics supplied the basis for the romance. The romance absorbed in it different types of literature such as the fable, gnostic poetry, the novel etc.

India is the home of great variety in thought and life, being a unity of different races and communities speaking different tongues. Each race has its own ancient history, its peculiar wit and humour and distinct culture. The Marathi language, which goes back in origin to the sixth century A.D., abounds in literature which in its tone and description is quite peculiar and unique. It is a language, which is one of the richest, perhaps the richest in thought and expression. Going then to the unwritten

literature of these people, what marvellous treasures have been left to us by word of mouth! The tales and fables, apart from their didactic value, have that wonderful creative unity with them to strengthen and enlarge the Tree of Marathi literature. Though intended for amusement, these fables throw much light on the people themselves. Thus in the treasure trove of India are imbedded folktales, myths, fables and legends. The seers of old, the wise instructors of humanity, have conveyed to us many interesting facts by word of mouth. In the words of Euripides, "the Myth is not my own, I had it from my mother". In the development of an individual from child to man, the mind is enlarged and becomes refreshed by the folk-tales and fables.

"Thus have I heard", says the *Udgatri*, the Vedic poet, and the Vedic chant begins, "Thus have I heard". Thus what I have heard I wish to say with those glorious words. I had often listened with great interest to the folk tales and fables as they

unrolled out of my mother's mouth. The fables touch my heart so much that I feel a keen delight. I felt so when I was a child, and now too I feel the same. These storytellers should have had genius to weave and produce such exquisite fables conveying knowledge and wisdom. It is my nature to share my pleasure with others and I hence share the following fables with the readers of the *Educational Review*.

THE OLD DAME AND THE CAKE

An old weather-beaten dame prepared flour cakes and allowed them to dry in the sun. Before the sunset, the dame gathered them all, but she was surprised to find that only one cake had not dried. So she queried the Cake and the other mischief-mongers in the following way.

"Cake, why did you not dry", the dame asked.

"The Sun didn't shine over me", replied the Cake.

"Sun, why did you not shine over the Cake," asked the dame.

"The Hay stood between the Cake and me", replied the Sun.

"Hay, why did you stay between," questioned the dame.

"The Cow didn't come to eat me", replied the Hay.

"Cow, why did you not come to eat the Hay", asked the dame.

"The Master didn't relieve me", was the answer.

"Cowherd, why did you delay in this", the dame queried.

"My wife served me no food", the cowherd said.

"Woman, why didn't you serve him food", the dame asked.

"My child, why did you cry", asked the dame.

"An Ant bit me", in tears the child cried.

"Ant, why did you bite the child", questioned the dame.

The tiny Ant in the end replied: "If you place your small finger over my hill, do you think I'll remain without biting you"!

THE RAT WHICH LOST ITS TAIL

A young Rat, while playing over the rubbish heap, was picked by a thorn in her tail. As she could not remove the thorn out, she began to squeak in pain. She rolled and rolled on the lawn to remove the thorn, but in vain. She then immediately ran to the tailor in the adjoining village and said to him; "Sir, please remove the thorn from my tail". The tailor took pity on the poor creature and with a long needle tried to remove the thorn from the tail. While removing it, he cut off the tail itself. The Rat began to curse the Tailor and cried, "Tailor, now that you have cut off my tail, are you going to restore my tail back or give away your needle"? What could the Tailor do? He simply gave away the long needle and the Rat was on her way home. She spied an old man stitching a torn blanket with the aid of a broom stick, and she said to him, "Hallo, old man, what do you mean by stitching the blanket with a broom stick"? The old man lifted up his eyes to see the kind person addressing him. "Take this needle and mend your blanket", she said. "I am not in a hurry and I shall wait". The old man felt extremely happy, and with the needle, began to mend the blanket. But while stitching, he broke the needle. The Rat cried out, "Old man, why did you break my needle? Either give me back my needle or your blanket". The old man in sorrow had to part with the blanket, and in joy the Rat marched on. On the way, she saw an old woman covering her head with a mud pot. "Poor old mother", accosted the Rat, "does any one cover one's head with a pot? Take this blanket and use it". The old woman removed the pot and while spreading it on her head, the aged blanket gave way. "What", exclaimed the Rat, "what have you

done with my blanket? Either give me your pot or give me back my blanket'. Alas, the poor woman had to give away her pot and the Rat moved on in glee. She saw a *mali* gathering water in his hands and pouring it over his cucumber beds. The Rat again in pity went near the male and said, "Mali, what a fool you are! How long will it take for you to gather water in your palms and pour it on your cucumber beds? Take this pot and use it well". The poor *mali* was overcome with joy and took the pot. But while lifting water from the well he broke it and the Rat in surprise asked, "Mali, what a bad man you are! You have broken my pot. Either give me the cucumber or give me back my pot." The Rat took the cucumber and further on, she saw a way-farer riding on his bullock and eating coarse bread. To him the Rat said: "O traveller, I pity you for eating raw bread. Please have a portion of the cucumber and eat it". The Traveller ate away the whole fruit and the Rat in amazement explained, "What an ungrateful man you are! You've eaten away my whole fruit. Now give me back my fruit or give me your bullock". The poor way-farer had to part with the bullock. The Rat drove the bullock on, and some distance hence saw an oil-monger's cottage, where the oil mill was being turned by a yoke drawn by a bullock on one side and the oil-man's wife on the other. The Rat in compassion said to the oil-monger, "What a wretched man you are to use your wife to draw the mill! Have this bullock and run the mill". The oil-monger felt happy and released his wife and tied the bullock to the yoke. After a few turns, the bullock stumbled and died, and the Rat in anger cried out, "You oil-monger, you've killed my bullock. You must now either give me your wife or give back my bullock". The oil-monger in deep grief had necessarily to part with his wife. The Rat in joy walked away with the lady. On the way, she saw a party of young men singing songs and having music with *mrudanga* (double drum) and other instruments. The Rat went to

them and said, "Young men, your congregation is useless, if your music is not accompanied by a dance. Have this lady for the dancing". The rustic folk welcomed the idea and allowed the lady to dance. While dancing, the lady became exhausted and died. The Rat, witnessing the scene instantly cried out, "You fools, you've killed my lady, Give me the lady back or give me your drum and the other instruments." The Rat thus took the drum and the pipe and merrily trotted along, singing a song, striking the drum and blowing the pipe thus: -

Hallo brothers and sisters.

Lost the tail, got the needle,

Lost the needle, got the blanket,

Lost the blanket, got the mud-pot,

Lost the mud-pot, got the cucumber,

Lost the cucumber, got the bullock,

Lost the bullock, got the lady,

Lost the lady, and got the drum.

So singing she blew and blew the pipe, struck the drum and walked her way home.

THE VIZIER'S SON, WHO MARRIED THE TAMARIND TREE

Long long ago there was a king. He had an extensive garden, full of jasmine plants. In the evening the King used to see numerous buds, but at dawn when the flower gatherers tried to collect them, there would not be even one flower. This phenomenon repeated itself every day and the King in surprise gave the strange news to his vizier who ordered a careful watch. None of the watch could detect the thief, for just at break of day they used to snore away in sleep, overcome by the effort of keeping awake the whole night.

The King's son decided to find out the thief. One moon-lit night, he dressed in black, and with his fingers painted with white-lime to look like jasmine flowers, hid himself under a bush with his hands lifted up and finger tips mixed up with the flower

buds. Just at the break of day, the plantain-tree in the garden opened itself and out of it emerged a lovely maiden with a tiny basket to gather flowers. When she placed her hands over the whitened fingers, the Prince instantly caught her hands. He saw her and at once fell in love with her and she reciprocated the love. They both wished to marry each other.

He did not announce the facts happening in the night to his father, but pretended that he had failed to find out the thief who stole the flowers. But, he paid daily visits to the maiden of the plantain tree and spent with her as much time as he could.

One day the Prince requested his father to permit him to marry the plantain-tree. As young children play about imagining extraordinary things with toys, the father naturally allowed the Prince such a sport. After a time, the Prince told his parents that he had been blessed with a child and had therefore arranged a dinner. He invited very many friends and relatives. Everyone was surprised and eagerly awaited to see the function. When everything was ready, the Prince called out his wife. Suddenly the plantain tree opened, and there emerged out of it a beautiful lady adorned with precious jewels with a baby in her arms to act as the host and to receive the blessings of the elders. No one could believe his own eyes. The Prince with his wife and baby lived happily ever afterwards.

The Vizier's son heard this and in a fit of jealousy announced that he would marry a tamarind-tree in the garden. The Vizier permitted his son to do so. After a certain period, the boy reported to his father that he was blessed with a child and arranged for a dinner. The Vizier was seated with the fond hope of seeing his daughter-in-law

and the new-born babe. When the Vizier's son called out his wife, to the utter terror of all, a ghost came down the Tamarind-tree with an urn full of dung in one hand and a broom in the other. Tumult and confusion prevailed, and all began to run away pell-mell. But the ghost of the tamarind tree chased them all, sprinkled the solution over their heads and struck them with the broom.

This legend about the trees rests in a belief that the tamarind tree is a nest for ghosts and other evil spirits. People are generally afraid to go near it during the mid-hours of the day or its night. This may be a superstition. It is also superstition to worship the peepul tree, which is propitiated by Hindus who believe that the sterility of women folk is cured thereby. However belief is relief.

What rationality lies behind these fables is not for discussion. The fable is not to be neglected, since it is of capital importance and enjoys a peculiar privilege. "Considered as less noble than the epic poems and the drama, less appreciated by first class writers, it has been more non-religious and less bound by the ordinary rules of literary productions. Nearer the masses by its subject matter and the readers to whom it appeals, it has in spite of artificial literary form kept a taste for the living reality". Just as the arts reveal the characteristic features of the civilisation of a particular tribe or community, the folk-fables disclose or interpret what may be termed the cultural unity. The artistic effort and the self-expression contained in the folk-fables and tales definitely add to the glories of Man.

BOOK REVIEWS

THE ART OF DISCIPLINE AND LEADERSHIP—OR HOW TO MAINTAIN DISCIPLINE AND ATTAIN LEADERSHIP. BY ABUL HASANAT, (INDIAN POLICE) -- THE STANDARD LIBRARY, (DACCA) — PRICE RS. 2-4-0.

THIS is an interesting and provoking book suggesting new reflections on old terms and ideas, like discipline, the right disciplinarian, inferiority complex, and others. The last idea should accurately connote the conviction of secondariness so acute that it actually prevents the doing of useful work and not the more generally understood meaning, *viz.*, a feeling of inferiority entertained by one in relation to his accomplishments, mental and physical, relatively to his fellows. To turn the complex to good account by making oneself good in some other respects and thus develop mental strength is urged. Unruffled temper, presence of mind and natural dignity may overcome the effects of a number of imperfections and even defects of character and achievement. The author lays sufficient stress on the externals of discipline also and comprehends the word in its widest signification. Self-deception of every kind is to be avoided; definiteness in orders and language is to be consciously developed. For the teacher, in particular, numerous hints are given as to his deportment towards pupils, and he is cautioned to organise his time on a definite plan, in other words systematise routine and effect an analogue of scientific management. Justice should be tempered with generosity and discrimination and encouragement of honest work should be readily forthcoming from all of us towards others under our control or guidance. The chart index at the end of the book should be of peculiar interest to the reader.

J. H. STEMBRIDGE. OXFORD PAMPHLETS ON INDIAN AFFAIRS. NO. 11. LANGUAGES AND THE LINGUISTIC PROBLEM—BY S. K. CHATTERJI. NO. 12. THE HEALTH OF INDIA—BY J. B. GRANT. NO. 13. IRAQ—BY SETON LLOYD. NO. 14. THE ABORIGINAL—BY VERRIER ELWIN.

The outline geography of the U. S. A. is given by Mr. Stembridge who is the Geographical Editor of O. U. P. with a view to serve as a basis for wider knowledge about the great American Commonwealth, in its physical divisions, industrial and agricultural activities, political activities, population etc., and to bring into relief the community of ideals and mutual interest that mark nearly 200 millions of our American *confreres* who are so much the hope of the world's future now. The illustrative maps are very instructive.

Dr. Chatterji surveys the historic development and present importance of the great speech-families of India and discusses whether there is any need for an Indian national language, with the final prescription of a simplified Hindi or Hindustani in the Roman script. The preeminence of this language is then explained and justified; and we are cautioned to remember that the pan-Indian language need not be a culture language.

Dr. Grant, Director of the All India Institute of Hygiene and Public Health, Calcutta, stresses the lack of effective economic and social measures for the maintenance of public health and the necessity of passing consolidated health acts, and of maintaining an interdependence of the various agencies for improving public health. The well-known Mr. Elwin, who is an authority on anthropology and folk-poetry, analyses the ethnic affinities of the different aboriginal groups and would divide them, from the point of view of culture, into four broad

categories. Except the real primitives, the others are being injured by their culture contacts and are losing their old tribal gaiety and other things of value. Mr. Elwin does not see any value in the constitutional reservation of the aboriginal areas under the Act of 1935 and discusses the merits of the missionary and geographical solutions, finally recommending the restoration to them of the liberties of their own countryside, whatever this may comprehend.

Mr. Seton Lloyd is the adviser to the Iraq Government Department of Antiquities and is therefore a good and warm supporter of the 1930 treaty between Great Britain and Iraq and hopes that constitutional democracy can come about, in spite of great obstacles in the way. He deems education to be a remedy for many of the ills of Iraq and would like it to be adapted to the needs of the people of all classes and ages.

NURSERY RHYMES: K. & J. COOPER & CO., BOMBAY. PAGES 30.

In these days of paper shortage, it is a pleasure to come across a book of this kind, beautifully produced and copiously illustrated. The twenty-one poems selected include most of the popular nursery rhymes. This is just the sort of book to place in the hands of a child learning English.

THE SLAVE OF IDEAS & OTHER PLAYS BY SRI A. S. P. IYER, M.A., BAR-AT-LAW, I.C.S., C. COOMARASWAMY NAIDU & SONS, 27, CHINNATHAMBI STREET, MADRAS. PAGES 186. PRICE RS. 1-8-0.

This volume contains four plays. One of them, "A Mother's Sacrifice," deals with the well-known historical story of Punna, the heroic Rajput nurse, who allowed her own child to be assassinated in order to save

her royal ward. "Sita's Choice" deals with the theme of the remarriage of widows. "The Slave of Ideas" is an essay in abnormal psychology and tries to portray the soul of a murderer, torn between the conflicting claims of revenge and religion. "In the Clutch of the Devil" is a profoundly interesting study of black magic and sorcery in Malabar.

All the plays, it is needless to say, are well written. The plots are well conceived and closely knit, the characterisation is competent and the dialogue is lively. To the reviewer, "In the Clutch of the Devil" seems the most interesting among the plays. We have great pleasure in recommending the book to school and college libraries. Amateur players may find the plays suitable for representation on the stage.

THE ROYAL JESTER OR TENALI RAMA. SECOND, REVISED AND ENLARGED EDITION. BY A. S. PANCHAPAKESA IYER, M.A., I.C.S., BAR-AT-LAW, FELLOW OF THE ROYAL SOCIETY OF LITERATURE OF THE UNITED KINGDOM, K. V. PRESS, BOOK DEPOT, VELLORE. PAGES 104.

We had sometime ago the pleasure of reviewing the first edition of this book. As the author remarks in a preface, "The fact that the book is going in for a second edition so soon after the first one is, indeed, proof of the Royal Jester's never-waning popularity." The present edition contains not less than 23 additional stories. As we pointed out in our review of the earlier edition, the stories are interesting not merely in themselves, but also for the manner in which they are told. The book may be placed in the hands of our school children and should find a place in school libraries. At the same time it will also prove of interest to the general reader.

OXFORD PAMPHLETS ON WORLD AFFAIRS. NO. 63. AN ATLAS OF THE U. S. A. — BY

EDITORIAL NOTES

THE schoolmaster has to be as carefully educated for his responsible duties as his pupils have to be educated by him. And just as **Educating the Educators.** it is a common fallacy to suppose that one's education ends at School or College, it has till recently been thought that the education of the teacher ends with the training course he undergoes before he enters service. Lately, attention has been devoted to refresher and extension courses for teachers in service. It is a still more recent suggestion that those in charge of schools must not only know how to supervise instruction, but must also know how to organise the programme of the school so that all the members of the staff will grow. Even as he teaches, the teacher must learn.

Mr. C. A. Weber, Superintendent of Schools, Galva, Illinois, U.S.A., has made in the May issue of the *Journal of Educational Research*, an interesting study of the report submitted by a sub-committee of the North Central Association of Colleges and Secondary Schools, appointed to study the problem of educating teachers in service. In other words, the problem may be stated as "how to encourage growth in service to cope with emerging problems, to set new goals for education, and to provide for more significant educational experience for the youth of America. . . ." Summarising his conclusions, Mr. Weber writes:

"In-service education of teachers in the secondary schools of the North Central Association, as judged by reports from the selected sample, is in a confused, perplexing, but promising state of flux. The

model practice in the secondary schools is traditional, supervisory, inspectional and individualistic, but administrators, teachers, supervisors and department heads agree that the model practices do not represent the most promising practices. Results confirm their judgment.

Techniques which are supervisory and inspectional and which originate with administrators and supervisors and which are individualistic rather than cooperative in character are considered of doubtful value, but they are almost frequently used. Techniques which involve teacher participation in planning and policy making, which involve teacher participation in all phases of the program of in-service education, which encourage teacher initiation of action as well as planning are considered most valuable, but these techniques are the least valued.

In the conduct of faculty meetings, in the organisation of committee activity, in the program of curriculum development, in the program of selection and orientation of new staff members, in the use of salary increments to encourage growth, in practices concerning leaves of absence* and in the selection of specific techniques, the administrator and his supervisors play the dominant roles even though these individuals agree that techniques involving democratic action are by far more valuable for promoting teacher growth in service.

The intentions of administrators are good, but habit and tradition have appa-

* For study.

rently become negative limits for their action. Habits are so insistent and so determinant that they interfere with enquiry, and the more commonplace they become, the more efficient they become in the control of action. Apparently, the task confronting the educator is to cast aside the fetters of traditional devices and let the teachers share in planning, policy making, procedure and evaluation."

It is instructive find that this enquiry emphasises in its own way the value of the old idea of freedom in education. If the teacher is to be educated while working, he must be allowed to educate himself. He must not be a mechanical cog in the administrative machine of the school. He must share in the work of running the school and planning its policy and programme. That is the only way of developing his initiative, stimulating his growth and getting the best out of him for himself and the state.

II

The appalling famine in Bengal, like a tremendous cataclysm of Nature, leaves us stunned and awe struck. Like cataclysms of Nature, it will leave behind widespread and longstanding effects. It goes without saying that it will affect education in Bengal profoundly. To the extent to which social life has been disorganised by the exodus from the villages to the cities and by widespread unemployment and destitution, to that extent the education of children must inevitably suffer. After dealing with the immediate threat of starvation and death, one of the most important problems requiring attention will be how to make up for the children the education they have lost. But even while the

problem of actual famine is being tackled, and as part of it, some attention must be devoted to the lot of teachers in Bengal. There can be little doubt but that they are among the worst sufferers in the famine. It is regrettable that in the budget presented in September, no special provision was made to meet the needs of teachers. We hope that the Government of Bengal have since reconsidered the question and decided on adequate measures for the relief of teachers.

III

To us in India, adult education means little more than making the illiterate adults of our country literate. As

Ideals of Adult Education. illiteracy is a vast and staggering problem here, this is no doubt as far as we may look at present. But

in countries where illiteracy has been conquered, ideals of adult education are naturally more advanced. In Scandinavia, as Sir Richard Livingstone, President of the Corpus Christ College, points out in an article in *The Spectator*, adult education has progressed to a remarkable extent. There are numerous residential colleges giving short courses in various subjects to educated adults. "In Denmark," writes Sir Richard, "the students are largely farmers and small holders and the most characteristic studies history and literature. In Sweden there are also industrial workers and members of the professional class, and the subjects include foreign languages, psychology, natural science, politics, history, religion, geography, hand work etc. There are (roughly) sixty of these colleges in Denmark to a population of 8½ millions (with 6773 students in 1939), fiftythree in Finland

to the same number, thirtytwo in Norway to less than 3 millions (with nearly 6000 students in 1936)." These figures show the popularity of such institutions for adult education. And extraordinary facilities are given for such study. In Sweden, firms release their employees for a course of 'adult' education and keep the jobs open during their absence. Sir Richard Livingstone suggests how Britain, which lags far behind Scandinavia in this matter, may set about organising such education. "Every university," he writes, "has already an extra-mural department, which provides classes and lectures in its district. It would be a natural extension of this work to take some big countryhouse near by, which the university could use for residential courses of varying length, so serving its neighbourhood in a new way, influencing it, strengthening its hold on it. They should be of different kinds for different interests and different levels of intelligence and education. Local education authorities, too, might, and should, provide colleges for adult education. And private enterprise should play an important part. In Denmark all, or nearly all, in Sweden many, of the People's High Schools are started by private enterprise—by individuals, groups of societies, which make the venture and are entitled to apply for grants from the state." While it is no doubt true that the immediate problem of adult education in India is the removal of illiteracy, we ought not to forget that ultimately adult education is for all, not only for those who have missed a satisfactory education, but also for those who have received one. For the modern world is constantly changing, and it is the function of adult education to keep the citizens abreast of the march of knowledge.

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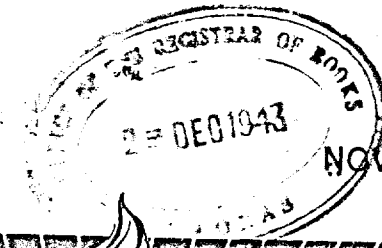
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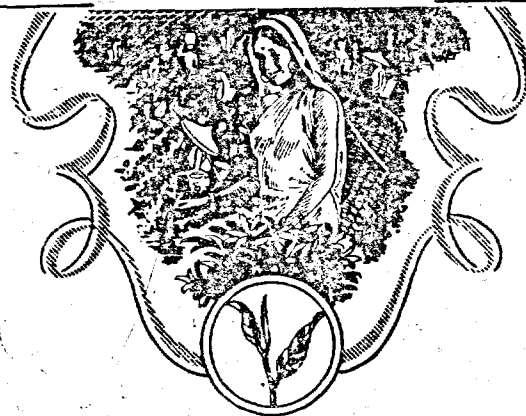
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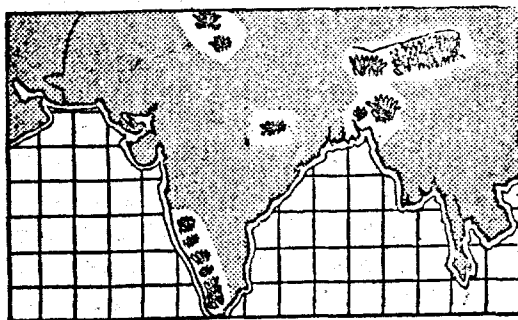
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VOL XLIX

NOVEMBER 1948

No. 11

RUSSIAN EDUCATION

BY SRI N. SARANGAPANI, M.A., L.T., *Personal Assistant to the Director of Public Instruction, Madras*

VARIOUS factors have recently intensified the interest of the people in India in the life and the peoples of the Soviet Union. The chief of these is the heroic part played on their own soil by the Soviet forces, against the Nazi hordes in the present war, especially the epic siege and relief of Stalingrad. Next in importance is the liquidation of the Communist International by Marshal Stalin in May, 1943. It is curious to note that in the Soviet Union, adherence to the idea of internationalism went hand in hand with isolationism, the latter having been born out of the anxiety of the Soviet Union to prevent her enemies undermining her position. Russia is now a member of the United Nations, having entered into a pact with Great Britain for 20 years on 13th July 1941 with an admirable sense of political tuning which is bound to militate against misunderstandings in existence over a long period. In the words of Marshal Stalin himself the abolition of the Comintern "puts an end to the lie based on the allegation that Moscow intends to intervene in the life and activities of other nations with a view to Bolshevising them". Lastly, the recent arrival in India of a party of Russian entomologists to study the methods of control of the locust pest and the use of poisons has made this zest for knowledge

greater. They had discussions with Indian specialists and freely exchanged views and experiences on the subject. The purpose of the mission is thus to enlist mutual co-operation for solving a problem of international importance. The mission has naturally excited the interest of the people of India in the development of the Soviet peoples to the rank of a major power and in the educational system which it has fostered in the post-revolutionary period. Attention has also been focussed on the ever-growing development of Russian art and literature, which have attracted the admiration and curiosity of the other nations of the world. It may be quite appropriate here to quote the words of the celebrated German philosopher, Count Keyserling: "I am certain of a great future for Russia, nay, one of the very greatest in every respect. Within this marvellously gifted people, rich in soul and vital power, one of the most important cultures of mankind will blossom forth."

Notwithstanding misunderstandings between the British Empire including India and Russia in the past, many characteristics are found to be common between the British and the Russian peoples on the one hand and the Indian people and the peoples of Soviet Turkestan on the other. When they

meet socially, they are the best friends. In recent years the Soviet Union has attempted to collect a vast volume of material regarding the Indian continent, but war has prevented her from going into the study deeper. For the promotion of mutual understanding and goodwill, it is essential that a closer study of the structure and ideals of the new social order, the language, literature, history and culture of her vast and penetrating civilisation should be undertaken by the people of this country.

As a preparation for this undertaking a review of the post-revolutionary Russian education appears to be essential. Education was made compulsory after the Revolution of 1917 and in a period of about 25 years a backward uneducated people have become educated. Before 1917, 10% were literate.

Soviet schools aim at a ten years' continuous course without any break at the age of 13 or 14. But owing to lack of buildings and an adequate supply of trained teachers, the schools are of the seven years type where all children between the ages of 8 to 15 are educated freely and compulsorily. The schools provide for co-education of boys and girls, and boys and girls choose the same subjects. Men and women are appointed as teachers according to their qualifications and no discrimination is made according to sex.

University education is open to all who complete their studies at the secondary school satisfactorily. Those who pass with marks of "good" and "excellent" are admitted free of charge and also receive grants for their own maintenance, where necessary, provided they keep up their standard of work.

Besides there is a large variety of Industrial Schools attached to factories catering to a million people a year. These schools combine specialised training with general education, so that young people can enter industry at 18 as fully qualified skilled

workmen entitled to receive an adult wage at the job.

The educational system thus advances from the Crèche to the Kindergarten, from the Kindergarten to the University and from the Technical School to adult education. Children between 8 to 18 receive education in the cities without a break. Every village has a school now where cultural school training is given and special facilities are provided for teaching local arts and crafts. Summer camps are also provided and in winter months, when snow is heavy, children stay at school and carry on their work as usual.

Great attention is paid to adult education in the Soviet Union and a variety of courses is provided. Free training classes have been organised for workmen in every industry in order to assist those who are anxious to improve their skill in their own jobs. An interesting application of this principle has been specially noticed in regard to the professions of teaching and medicine through Refresher Courses. These are arranged for the benefit of people working in outlying and rural areas and aim at assisting them to bring their knowledge in the subjects up to date.

The supply of trained teachers was particularly deficient in 1927 and many literates were called upon to teach. All those who so became teachers then have now become qualified by their experience. A decree of 1937 lays down that all teachers without professional training should qualify themselves by attending special courses so as to bring their knowledge up to date. They were required either to attend a special training class for one year on their own pay or to attend an evening institute for two years. Otherwise they would not be allowed to continue in their posts. Training colleges have, therefore, been organised in every district and every Republic has a Training College where the local vernacular is the medium and Russian the second language. The Soviet Union has taken special efforts

to increase the supply of trained teachers for the whole Union.

Besides, there are Training Colleges, for technical teachers and to remedy the shortage in teachers, the regulations of every factory require that every technician student under instruction should teach part-time in these training colleges.

Unemployment has been wiped out for more than 10 years now and systematic grades of training have been organised for the benefit of the workers. First of all there are the Higher Technical Schools corresponding to British Technical Training Colleges. These are utilised for foremen, shop managers, artisans etc. Secondly there are the Secondary Schools with a technical bias in wood and metal work corresponding to British Central Schools. Thirdly there are the Rabfacs or Workers' Faculties serving as a sort of Secondary Schools for adults between the ages of 18 to 30. Even soldiers with a knowledge of the three R's are eligible for admission and students are prepared for Matriculation in four years. Intelligent workers are also prepared here for higher technical courses. Lastly there are the Central Institutes of Labour providing training for manual occupations organised on the Time and Motion principles of Taylor, Owen and Ford. The training is for 6 months and gives the worker the same amount of skill as a six months course as an artisans' mate.

There are no elaborate buildings or equipment for these institutions. Students receive wages during their training and nearly 40% of the state's budget is spent on wages. The pupils are therefore not dependent on their parents. The percentage of attendance is 97 and as every one is a state employee, he may work in a school or factory in any part of the Union.

The schools thus provide for an all round improvement in the technical attainments of the workers. Those who have aptitudes for new jobs outside their initial ones can qualify themselves for such occupations,

by attending afternoon training classes attached to the factory, studio etc. after the working hours. Many amateur artists have thus started their training and have developed themselves into full blown professional companies either at the cost of the factories or Trade Unions or the State. General subjects like Politics, Economics, Philosophy, Literature etc. are however studied for their own sake and not with a view for a personal advancement in a job. In the result, it has been estimated that literacy among adults between the ages of 18 and 50 is very good, while it is less among people over 50.

Children under 16 years are not allowed to work under the Soviet Law, while those between the ages of 16 and 18 only worked part-time before the war. But now the rules have been relaxed as a war time measure and children can go to work at 16. But normally most boys and girls between 15 and 18 go into a technical school or a factory, where they may do three or four hours academic work a day and then five hours practical work in a factory. When they have finished their three years at the Technical School, they are qualified workers in the factory—fully skilled workers. The point is they carry on their academic education at the same time as they learn their trade.

The academic work in a Soviet school occupies only a part of the day. The rest of the time, the school is turned into a kind of club and groups are organised on any subject which the children wish to pursue. In a typical school there are groups in drama, gymnastics, sports, aeroplane building, scenery-making, sculpture, puppetry and several others. The leaders for these groups are specially engaged and paid by the school—they are not connected with the academic side—and the only obligation a child has, on joining a group, is to remain until the particular job undertaken is completed—until the play is produced or the aeroplane finished.

In this way the Soviet children get many opportunities of developing their technical skill and their aesthetic taste. If a child shows special aptitude for music or art the school can send him or her to the local Music or Art School for afternoon lessons or if he or she is interested in technical subjects, the child will spend several afternoons a week at the local technical centres where there are fully equipped workshops under the supervision of a specialist in wood or metal work.

Students play a responsible part in running their institutes, especially Technical Schools. Their meetings are quite responsible and exert great influence. The Chairmen of Students are busy men and are very heavily worked; so much so, that they find time to study only in the nights. Much enthusiasm is evident among the students and this is attributed to absence of luxurious distractions. Interest in work is stimulated by competitions between students of institutes. Two institutes sign an agreement to compete with each other in their academic prowess. They work for long hours and thousands can be found streaming in and out of the institutes between 11 P.M. and midnight.

Besides the technical studies the student has to do much social work. He must attend heavy courses in political science in which he learns the philosophy of communism and the ideas of Marx and Lenin. If he is a social enthusiast he joins the young communists and takes part in the organisation of societies and political agitation. Allowances for slowness in the progress of their studies are made for those who engage enthusiastically in social and political activities.

These activities of the technical students have a great cultural value. The keen politician has to read the newspapers and study political and social books. The Russian students have unlimited thirst for knowledge. They pore, over newspapers and books in tramcars, in their meetings in

odd corners and at all times and places. They move in peripatetic pairs, strolling backwards and forwards and debating the burning questions of the day. The intellectual development of the quite average young Russian worker is simply amazing and this is because their general syllabus in the schools includes a very wide study of literature and cultural subjects as well as utilitarian ones. Youth has thus vaster influence in Soviet Russia than in any other country. They form the hub of communal responsibility by virtue of the social organisation in which they live.

The content of teaching in an ordinary Soviet school is described as follows by an English teacher who retired after years of service from Moscow:—

"Obviously you could see the whole political basis of the Soviet Union permeating right through their teaching in the schools, even in their mathematical problems, but in their moral, in their ethical teaching they taught the children all over the world, to be courteous to their neighbours, to respect social or public property, to respect their own school buildings, not to carve the tables, or to write on the walls, because they were their own and they should look after them. They were taught to look after the older people because they had had terribly hard lives and because through them the children had all those advantages. That was their ethical training and that I personally consider is just the sort of teaching necessary for a child."

The content of Soviet education is thus quite different from what is in Britain. Soviet education teaches the doctrines of racial equality as opposed to theories of racial superiority. Again, it takes for granted the public ownership of land and industry. Finally it aims at training conscientious citizens with a comradely attitude to their neighbours. It condemns the exploitation of the labour of one man for the profit of another.

THE POLITICS OF POWER

By SRI N. R. BHUVARAHAN, M.A., "*Indian Express*," Madras

"IN passing by the side of Mount Thai, Confucius came on a woman who was weeping bitterly by a grave. The Master pressed forward and drove quickly to her; then he sent Tze-lu to question her. 'Your wailing', said he, 'is that of one who has suffered sorrow on sorrow' She replied, 'That is so. Once my husband's father was killed here by a tiger. My husband was also killed, and now my son has died in the same way.' The Master said, 'Why do you not leave the place?' The answer was, 'There is no oppressive Government here.' The Master then said, 'Remember this, my children: oppressive Government is more terrible than tigers'.

The theme of the present essay is the problem of insuring that Government shall be less terrible than tigers. In short, how best we can use power democratically for democratic ends. For, all political techniques from the time of Plato to our own day have aimed at transforming processes of coercion into processes of consent. And that is the task of civilised Government.

We can understand the use of power in politics by a patient and passionate effort of imagination, historical analysis and sober study of facts. Science has given us power over inanimate nature, power over plants and animals, and finally power over human beings. Each power involves its own kind of dangers, and perhaps the dangers involved in power over human beings are the greatest. There is always this danger among those who use power absolutely. They are never imbued with moderation and humane instincts. Power enables them to enjoy unjust privileges in society. That is why John Locke insisted that power should be robbed of its fanaticism and hedged round with commonsense.

Excessive concentration of political and economic power among individuals and groups is a potential menace to society in our epoch of violence, bloodshed, chaos and war. That I think was an offshoot of Liberalism which believed in uninhibited individual enterprise. Our problem, then, is how to use this preponderant concentration of power for social good and community well-being. It should not degenerate into despotism or tyranny. It should not become corrupt or inefficient.

"Power" as Bertrand Russell observes is "the ability to cause others to behave as we wish, or to prevent them from behaving as we do not wish." He distinguishes four types.

1. The case of the pig subjected to direct physical power over its body illustrates military and police power in society.

2. The donkey which is persuaded that it is to its interest to follow the proverbial carrot is typified by the power of propaganda.

3. The instance of performing animals which are regimented is typified by the power of education in Totalitarian countries.

4. The case of the sheep blindly following the leader without murmur is typified in party politics whenever, as is usual, a revered leader is in bondage to a clique or to party bosses.

It would be a tragic delusion for the people if power intended for social good is abused by its holders. Everyone admires the principles of the Sermon on the Mount. But its effect upon the average human nature has never been marked. It has always remained on paper and never been observed in daily life. Is man then a wolf

to another man, as Hobbes imagined, without political or social impulses? No one who follows the precepts of Christianity loves his enemy, nor turns his other cheek to receive a blow. The followers of Christ learnt, instead, to use the Inquisition and the stake. Nevertheless, they preached the gospel of love and brotherhood. They subjected the human intellect to the yoke of an ignorant and intolerant priesthood to degrade art and extinguish science for a thousand years. This is true of every fanatical religion.

Europe today is embroiled in a cruel and bloody war involving the slaughter of many millions. It is also scattered over with petty tyrannies of varying intensity. What is more menacing is the Nazification of Europe which has shattered all vestiges of civilised life and existence. All tyrannies have built themselves upon the citizen's conviction that he has no alternative save helplessly to obey the commands he receives. And a total war like the present one demands total effort. The distinction between civilian and soldier disappears, for everybody is in it whether he likes it or not. The state has become in sober fact Leviathan. The 'capitalist democracies' of America and England and the Republic of China have lost the clue to economic stability and are developing fascist tendencies under the cloak of discipline during wartime. The dictatorships, most notably in Germany and Spain, display chaotic variations upon the theme of gangster rule. In the Far East Japanese imperialism is bringing relentlessly new lands under its plough. This new barbarism threatens us from the East. It requires no special prescience on our part to discern that we are on the threshold of a confused epoch of fear and frustration in which men sacrifice the potential dignity of social worth to a mean struggle for economic acquisitiveness and political power. Our rulers enjoying unlimited power stand helpless before a dark fate they neither understand nor control.

All our dictators have a combination of the qualities of the demagogue, the wire-puller and the gangster. A discontented class, a persuasive tongue, a private army, a ruthlessness in seizing and holding power, a supreme indifference to bloodshed and treachery, a skill in organisation, a press in chains, a secret service, an efficient system of propaganda and a few faithful henchmen—these are the indispensable attributes to a dictator's rise and growth. With slight variations we find all these phenomena in the Germany of Hitler, the Spain of Franco, the Portugal of Salazar, the Russia of Stalin and till recently in the Italy of Mussolini.

Our power-politics will not abate in the near future. We are confronted with two ideologies which fight for their preponderance in our passionate planet. There is the Fascist, the Nazi and the Militarist Imperialist, constituting various brands of Fascism. On the other hand there is the Communist with his unshaken belief that revolution is the midwife of a new social order. All these people have firm faith in the use of power and violence for accomplishing their ends. As Prof. Laski observes: "Like all religious fanatics in history they equate disagreement with sin. The followers of Mahomed, the Ironsides of Cromwell and the Calvinists of Geneva were imbued with the same sublime self-confidence and audacity". Their technique of tyranny is the same with variations in intensity. Though all profess the same end of delivering the goods, curiously enough the Fascist, Nazi and Militarist-Imperialist methods do not result in the desired end in spite of the barrage of propaganda on account of their inherent inadequacies and contradictions. Why? All use power. All use violence. All resort to suppress opposition. All 'liquidate' their enemies and undesirables. All have the press in chains. All believe in regimentation and tuning. All suppress individual liberty. But the distinction between the Fascist and Communist methods of economic planning is of vital import to us. In the Fascist states

the instruments of production are owned by a few and operate for private profit and individual well-being, while in Russia which is on the road to Communism the instruments of production are owned by the State

and operate for social good. It makes all the difference whether power is wielded by a Pericles or a Sulla.

(To be continued.)

THE LICENSED TEACHERS

By SRI S. THIRUMALACHARI, M.A., L.T., Kanigur

IF something is chronically wrong in the human system, the Licensed Medical Man recommends that the innocent teeth should pay for it by being expunged, one and all, root and branch, from their basement. The astrologer ascribes it to the malefic action of certain perverse planetary forces. The diet expert attributes it to a maladjustment in the proportion of starch to fat etc., daily consumed by the individual. The moralist violently denounces the irregularity in the ethical and moral habits of the patient. The considered suggestions of these licensed experts is being paid heed to and the mortifying and purificatory ceremonies recommended are carried out at a heavy cost, with the result that, often, the patient has the chance to go sans teeth, sans money and sans stamina.

But when a Licensed Teacher recommends a treatment to a set of backward students, his suggestions are subjected to diverse public criticism; and his remedial measures, suggested after careful examination of the patient—child or student—are flouted. Why then call him a Licentiate in Teaching? A gentle pat on the back of a boy, a severe look or reprimand, an order asking him to stand on the floor or on the bench, or the levy of an imposition, are not considered as correctives administered by one authorised or licensed to do so, but as the outcome of a whimsical or foolish brain, which itself requires a treatment. Theories are floated to the effect that the divinity of a child requires to be respected

and a treatment of love and not of chastisement, even occasionally made, is the correct method of redressing it. An imposition is wrong on principle, since, by being engaged in it for a long time, the student's study of other lessons suffers and in these days of paper scarcity, paper is misspent. It is even carried to excess, with the remark that the student pays for his education and hence he needs no chastisement or reprimand. The teacher's role, therefore, is that of an employee to do a duty without murmur or remark.

But, a teacher does not grudge to be so, if he is not held responsible for the general result and progress of the pupils. The doctor administers medicines; his operation is a success. But, if the patient collapses, the doctor is not held seriously responsible for it. On the other hand, the methods of treatment, suggested by a teacher, are not respected, though he is held answerable for the educational progress of the pupil. The doctor is given unfettered jurisdiction to study the constitution and administer medicines. The same is the case with the lawyers. They draw the full fees from the clients irrespective of the result.

Is such a free hand given to a teacher to mould the shape of the student, entrusted to his charge and to mend his erring mode of approach to the study of the subjects? Does a teacher find his sincerity rewarded just like the lawyer or doctor on the basis of the result achieved?

Such is the calamity in the licensed profession of a teacher that the public fails to administer to him that treatment of equality with men in other professions which, in all humanity, he deserves. The result is obvious and who is at fault for this?

It is high time that the root cause of similar defects is properly diagnosed and

the handicaps which the teacher is made to face, are removed. This is one among many thought-provoking ideas, requiring deeper analysis and consideration; will the world realise that it has gone wrong in doing an injustice to a profession, which by its nobility, is expected to give a harmonious and pleasing shape to the future citizen and present child?

THREE FRENCH MATHEMATICIANS

By Sri A. A. KRISHNASWAMI AYYANGAR, *Intermediate College, Mysore.*

THE title of the present discourse relates to three great mathematicians, Lagrange, Laplace, and Legendre, who spanned among themselves a whole century of mathematical thought (1736-1833), covering three-fourths of the eighteenth century and one-fourth of the nineteenth. With their contemporaries and colleagues, they laid the foundations of almost all modern mathematics left over by Newton and Descartes. The rough outlines sketched by these great French pioneers were destined to develop into distinct fields of mathematical inquiry, the theory of numbers, groups, elliptic functions and modern analysis in the hands of mathematical giants like Galois, Abel, Gauss, Hermite and others. They mark the close of a mathematical epoch which was concerned more with the discovery of mathematical facts and less with the philosophy or foundations of mathematics. Their mathematics may be less vigorous in some places but not less suggestive, stimulating and inspiring than all that came after.

The first and the foremost of the three mathematicians is Joseph Louis Lagrange. He was born in Turin and died at Paris. He was of mixed French and Italian blood. He was the greatest and the most modest mathematician of the eighteenth century, a founder of two scientific academies and a

favourite of three monarchs. In 1766, when Euler left Berlin, Frederick the Great expressed the wish that the greatest king in Europe should have the greatest mathematician in Europe resident at his court, while Napoleon lavished several honours on him, made him a senator, a count of the empire and a Grand Officer of the Legion of Honour.

No fire can spring up without an initial kindling, not excepting the fire of genius. We all know how the great Ramanujan's genius was kindled by Carr's *Synopsis*. In the same way, Lagrange's passion for mathematics, analysis in particular, was roused by the study of Halley's *Essay on Newton*, which explained the superiority of the calculus methods to the lumbering geometrical ones. Lagrange changed over from his initial interest in classics to mathematics and soon became the foremost analyst of the day. He was never a geometer, though he did not dislike geometry like some of the later mathematicians. Geometry, said Lagrange, when recommending the study of analysis to his pupils, is a strong bow, but it is one which only a Newton can fully utilise.

The first fruit of Lagrange's labours is a paper enunciating the principles and the applications of the Calculus of Variations, a new branch of mathematics which was

just struggling to see the light of day. It was then simmering vaguely in Euler's brain but took more definite shape in Lagrange's Euler recognised the generality of Lagrange's method and withheld the publication of a paper of his own, covering more or less the same ground, so that the young Lagrange may claim the undisputed invention of the new calculus. Lagrange was fortunate in securing the friendship of two illustrious and influential mathematicians, Euler and D'Alembert, who helped him on to office and recognition. As a contrast, we may mention the behaviour of Laplace to his contemporary, Legendre. Laplace, though he was well-placed and had more than his due share of public recognition, was mean enough to exert his influence in preventing his colleague, Legendre, a mathematician of no mean order of excellence, from obtaining his deserts. The poor and timid Legendre had to accept the comparative obscurity of his life, to which the hostility of his colleague condemned him. Laplace, the son of a poor peasant, could not realise how he would have been nowhere but for the helping hand extended to him by the generous D'Alembert. If only such hostilities and intolerances do not permeate academic circles, the Muse of learning would advance with firm steps towards the Temple of Wisdom.

Lagrange's masterpiece was the *Mécanique Analytique* described by the Irish genius Hamilton as a 'scientific poem'. The author's boast was that it was achieved without a single geometrical diagram. Herein we find the universe pictured as a rhythmical theme of numbers and equations. The Lagrangean equations in mechanics and the new concept of the Potential have unified a vast universe of phenomena in a single scientific principle in much the same way as the Newtonian law of gravitation has been able to explain all celestial movements. In the mathematical theory of sound, Lagrange advanced much beyond Newton and gave the correct mathematical

formulation for the problem of the vibrating string.

For a satisfactory scientific explanation of the phenomenon of moon's libration, i. e., the moon's presenting the same face to the earth, Lagrange was awarded the grand prize of the French Academy of Sciences. This was only the first of several prizes that he won solving various difficult problems in astronomy.

Lagrange's health was none too good for the strenuous mathematical life that he led. He was producing memoirs at the rate of one per month. Like Newton, in later life he broke down in health under prolonged concentration on problems of the first magnitude and developed 'melancholia' and extreme indifference to mathematics.

After working as the physico-mathematical director of the Berlin Academy for twenty years under the patronage of Frederick the Great, he returned to Paris about the time of the French Revolution. Though he was received with every mark of distinction, his health was so shattered that he showed the least enthusiasm. It is reported that at his friend Lavoisier's scientific gatherings he would stand staring absent-mindedly out of a window, turning his back to the guests, a picture of sad indifference. However, his mind was not kept blank. He began to study metaphysics, religion, the theory of languages, medicine, botany and chemistry. He found chemistry as easy as algebra. Only arithmetic puzzled him. Indeed several great mathematicians of the eighteenth century including Euler and D'Alembert had found arithmetic tough though it looked easy at first sight. With great effort, Lagrange achieved the complete solution of the indeterminate equation $Nx^2 + 1 = y^2$, a problem solved by Bhaskara, an Indian mathematician in 1150 A. D. with so much ease and grace.

Lagrange's general solution of equations proved a great inspiration to all the

algebraists of the eighteenth century. His method succeeded for the equations of degrees 2, 3, and 4 but broke down for 5 and it was left to the efforts of later algebraists to get round this awkward corner.

It was natural that after strenuous work of about half a century in the field of mathematics, Lagrange should feel that there was nothing more to discover. He went to the length of predicting that chairs of mathematics in academies and universities should presently sink to the undistinguished level of those for Arabic. At this distance of time we may well smile at the pessimism of Lagrange, for we know now that Lagrange's epoch was only the dawn of modern mathematics and huge new departments were yet to develop under such geniuses as Gauss, Kronecker, Hermite and Poincaré.

The French Revolution left all the three French mathematicians and some more like Cauchy quite unscathed. Nay, more, they enjoyed special privileges. In fact, the most important scientific reform of the French Revolution, viz., the perfection of the metric system of weights and measures had been entrusted to Lagrange. We owe it to Lagrange's commonsense that 10 was chosen as the base, instead of 12 which had its own earnest supporters. To bring home the absurdity of 12 as a base, Lagrange proposed a still more absurd base 11. It seems as if cricket clubs have taken the cue from Lagrange seriously and are adopting 11 as a systematic unit. Thank God, the members of the committee for the reform of weights and measures thought differently under the able guidance of the president Lagrange and resolved to stand by 'ten'. There are some people who dislike the metric system for no other reason than that it was one of the products of the French Revolution, whose rage was the destruction of all previously existing things, not merely royalty but such harmless things as the division of the circle into three hundred and sixty equal parts.

Lagrange's last days were spent in revising his monumental work, *Mécanique Analytique*, for a second edition. The first edition was prepared for the press by Legendre and printed by a Paris publisher under the persuasion of a friend of Lagrange. When a copy of the first edition was placed in his hands, he was suffering from melancholia and did not even care to open the book. But in the last years of his life, although he was past seventy, his old power returned to him and he worked incessantly as was his custom. But towards the end of his days he had fainting spells, especially when getting out of bed in the morning. He felt his death approaching and was closely watching the gradual exhaustion in all his limbs which were weakening day by day. But he was quite satisfied with his life. He had no regrets. He never hated any one and had never done anything bad. He waited quietly for his death. The end came as softly as he had desired. He never awoke from the last fainting fit which came on the morning of April 10, 1813. A state funeral was arranged and the body of Lagrange was buried with all honours in the Pantheon, where rest some of the greatest men of France.

Pierre Simon Laplace was born thirteen years after his great contemporary, on March 23, 1749, and died at Paris on March 5, 1827. This man born of poor parents sought position and fame with a vengeance and when he succeeded in his heart's desire he was ashamed to admit his low parentage and cut his poor relations. In this respect he was the exact opposite of the noble D'Alembert who was proud to proclaim his gratitude to his poor foster parents, when he attained his justly merited position and became a mighty figure in the French scientific world. Laplace introduced himself to D'Alembert through a letter on the general principles of mechanics and the generous D'Alembert immediately recognised the merit and plight of the young man and got him an appointment as a teacher. Laplace was keen on doing his

best work in mathematics and won esteem and recognition in official circles. In his anxiety to get to the top of the mathematical ladder at any cost, he plagiarised outrageously from all his contemporaries and predecessors what he needed for his purpose. From Lagrange he lifted the fundamental concept of the Potential and from Legendre whom he treated so atrociously he stole spherical harmonic analysis. But in fairness to Laplace, it must be mentioned that his own original contributions were also first-rate. His master-piece was the *Mécanique Céleste* in which he established the important fact about the solar system that it is a stable one. In other words, the distances of planets from the sun vary only slightly about their mean values. Newton himself had no clear ideas about the stability of the solar system and imagined that divine intervention was necessary to preserve the configuration of the solar system through all the ages. As the forces involved are numerous and the mutual actions very complicated, the problem could not be solved easily until Laplace stepped in with his acute analysis. But with our present knowledge we can say that even Laplace's solution applied only to a highly specialised solar system, ignoring other important factors such as tidal friction, of which Laplace was certainly ignorant. Laplace is also responsible for the nebular hypothesis for the birth of stars.

Like Lagrange, Laplace was honoured by the French Academy for his solution of very intricate problems in astronomy, such as Jupiter's satellites, and the peculiarities in the motions of Jupiter and Saturn. He had wisdom not to fritter away his energies over various attractive mathematical topics but to confine himself to one or two subjects and achieve therein the utmost he was capable of. The only other string to his mathematical bow was the Theory of Probabilities. His 'Theories analytiques des probabilités' is a great work which exercised an immense influence on all later writers on the subject. However, his magnum opus was the

'*Mécanique Céleste*'. It ran over five volumes. The whole work had taken the author about twenty-five years to elaborate and was finally completed only two years before his death. On account of this work, Laplace is sometimes called the Newton of France.

Laplace's pen offered a strong contrast to the remarkable elegance of Lagrange's style. Laplace cared only to present the results and conclusions, leaving intricate mathematical arguments to be worked out by the reader himself with the encouraging remark, 'Il'est aisé à voir,' (it is easy to see), which may mean actually several days of hard labour not only to the reader but to the author himself. But when not faced by the difficulties of rigorous mathematical exposition, Laplace shone bright in his popular expositions written to clarify the ideas of his hard scientific works. His non-mathematical description of 'The System of the World,' and his introduction to his 'Treatise on Probabilities,' bear witness to this.

Laplace is essentially a mathematical physicist, while Lagrange was a pure mathematician. While the latter was intent on achieving elegance, generality, accuracy and depth in his themes, the former was proving into the secrets of nature using mathematics mainly as a tool for his purpose. To the majority of his contemporaries, Laplace ranked higher than Lagrange, for his work was more spectacular and dealt with more concrete phenomena which could be understood by other scientists. Laplace's theme being the universe itself carried with it its own natural glamour. The remarkable irony, however, about physical researches is that they may sooner or later explode while the pure mathematics that was in the background of their make up would remain a permanent contribution to the advancement of science. Laplace's work is going through the same fate now. No one will take seriously Laplace's nebular hypothesis or his conclusions about the stability of the solar system, but the mathematics underlying

ing his theory is applicable to many late discoveries such as electro-magnetism, and boundary-value problems. The Laplacian function enters indispensibly into the theories of modern mathematical physics. It is interesting to observe that the detection of a flaw in 'Machanique Celeste' and its correction by the Irish genius Hamilton, then in his seventeenth year, brought him an international standing in astronomy.

Lagrange and Laplace were spared the guillotine of the French Revolution on account of their mathematics, which was required for war efforts, the calculation of trajectories for the guns and the manufacture of salt-petre for gun-powder. Laplace had a way of worming himself into the favour of each political party that came to power. He played the slippery game of politics without apparently any effort and gained his own ends. Probably his study of the stability of the solar system helped with devices to maintain his own stability and glory under every change in government. Napoleon thought highly of Laplace's mathematics and appointed him to the Office of the Ministry of the Interior. He was found, however, so inefficient that he had to be removed from this office within six weeks. But he was not neglected. He was honoured with the Grand Cross of the Legion of Honour and the Order of the Re-union and was made a count of the Empire.

Laplace's last days were spent in a comfortable country-estate not far from Paris. He died after a brief illness on March 5, 1827.

Adrian Marie Legendre was born in 1752 and died in Paris in 1833, six years after the death of his hostile colleague Laplace. He could not rise to the heights of office which Lagrange and Laplace filled, nor could he catch the eye of Napoleon. But he was a member of several public commissions, notably the Anglo-French commission of 1787 to connect Greenwich and Paris geodetically. His mathematical work though eclipsed by his greater contem-

poraries was only second to them. He wrote the famous 'Elements de Geometrie' which replaced Euclid and was one of the most widely used text-books on the continent. His 'Theorie des Nombres' is another important work. It contains a noteworthy theorem in Arithmetic known as the law of quadratic reciprocity, a veritable gem as Gauss called it. We may recall in this connection how Lagrange's genius was baffled in his meditations on Arithmetic and how Laplace kept himself within the safety zone of arithmetical researches. Legendre proved Fermat's Last Theorem for the case $n=5$, i.e., he showed that the sum of two fifth powers cannot be another fifth power, all the numbers being integrals. His *Functions Elliptiques* is another important work and this field developed an individuality of its own in the hands of Jacobi, a contemporary of Legendre. Legendre himself openly recognised the superiority of Jacobi's methods to his own and recommended them for adoption. His memoirs on the method of least squares, the theory of attraction and geodetical operations show the versatility of his genius.

Coming between two groups of stars of the first magnitude, Laplace and Lagrange on one side, and Abel, Jacobi, and Gauss on the other, Legendre's work served as a bridge between two schools of mathematics and could not show up its own lustre to advantage. We sympathise with Legendre for his unfortunate position which was largely due to his environment. Legendre lacked a D'Alembert and an Euler to push him up, while Laplace's hostility completed the disaster. However, even as it was, Legendre's work merits the highest credit for bringing new functions into analysis which bear his name and creating two new regions of human thought which are the most difficult and the most interesting in all recent mathematics—regions which are of special value to our Indian mathematicians the great Ramanujan being an illustrious example of what an Indian could do in this line, the purest of pure mathematics.

SOME ASPECTS OF TEACHING ENGLISH

BY SRI S. SUBRAMANIA AIYAR, B.A., L.T., *Retired Headmaster, Thyagarayanagar*

PUPILS generally have a tendency to pronounce *s* in reason, cause, rise, rose, fuse, as voiceless. The *s* in them should be pronounced as *z*. Similarly they should pronounce as *z* the plural suffix *s* or *es*, and the *s* or *es* denoting the third person singular present tense of a verb.

2. The generally accepted rule regarding the pronunciation of *s* or *th* (voiceless) is that when they occur between two vowels in a word, they become voiced; rose, rise, leather, mother, neither, either, pleasant, please, cause, reason, wise, visit, result.

In this connection the teacher may also point out that in some words *s* is voiceless when they are used as nouns, and voiced when they are verbs:—excuse (*n. s*), excuse (*v. z*); abuse (*n. s*), abuse (*v. z*). The pupils should also be taught that when *s* ends a word or syllable, it is generally voiced; when it begins a word or syllable, it is generally voiceless. Examples in illustration of this rule may be elicited from the pupils themselves. Collective answering by the pupils should be encouraged, and the accepted answers may be written on the blackboard.

3. The teacher may write down the following words on the blackboard and ask the pupils whether the letter *x* in them is voiceless or voiced:—exceed, axiom, execute, executive, exercise, example, exhibit. The generally accepted rule in regard to the pronunciation of *x* is that when the stress falls on the syllable ending in *x*, it is voiceless, and that when it comes later than the accented syllable, it is voiced; *x* is also voiced after a voiced consonant, and voiceless after an unvoiced consonant: extract, experience, exhibit (*gz*), exercise (*ks*), execute (*ks*), but executive (*gz*).

4. Correct speaking should be practised before correct reading. That is why pupils

should be made to speak more than to write. Conversation lessons should take precedence over other kinds. The teacher may read out passages, from the class reader laying stress on such words as are likely to present difficulties of pronunciation. The pupils may next have their turn at reading. The mistakes made by each pupil should be corrected cumulatively by the whole class, and the correct pronunciation should be indicated on the blackboard by means of dictionary script; execute (*ekse'ku:t*), executive (*egzeku'tiv*).

5. The words ending in *ory*, *ary*, *ry*, *tive*, *ive* are generally accented on their stems; prepara'tory, eva'sive, prohi'bitive, interrog'atory, persua'sive (*perswa'sive*).

6. It is however well to remember and cannot be too often repeated that no well-defined rule exists for locating the accent in a word, and that any attempt based on analogy is often misleading. The surest remedy then lies in hearing eminent speakers and referring to a reliable dictionary for correct pronunciation. A good teacher of English must himself be expert at the subject. He should hold occasional tests oral and written to gauge the progress of his pupils, the questions set by him being of the following type: Locate the accents in the following words: Preparatory, courageous, alluvial, usual, reciprocate, vindicate, promotion, compensate, visible, refuse (*n*), advantage, initiative (*ini'tiative*, because the second syllable in *initiate* is accented).

II. IDIOMATIC OR STANDARD ENGLISH

7. This type of English is the one that is spoken or written by a majority of well-educated Englishmen. Standard English has grown out of colloquialisms and slang. What was once slang, in time became a colloquialism, and this gradually became

Standard English. Dr. Campbell attributes three essential qualities to Standard English: (1) that every word of it should be used by speakers and writers of repute, (2) that it should not be local but national, and (3) that it should be in present use. A careful application of this test will reveal the existence in English of a large number of expressions not falling under the category of Standard English, and they are colloquialisms and slang.

III. SLANG

8. We should give a wide berth to slang which is the type of English spoken by the illiterate. It is also called vulgarism or illiteracy. The teacher should tell his pupils that the following are slang and should not be used:—*jolly* savage, to be out for *kudos*, *beastly* drunk, a *slapping* dinner, *stuff* for angry; a *power* of work for a large amount of work.

IV. COLLOQUIALISMS

9. Colloquialisms should not be used in serious writing; their use should be restricted to conversation or dialogue and letter-writing. The following sentences contain colloquialisms which are best avoided in serious writing:—He made a *pile* (a heap of money). You want to *pull my leg* (to befool me). An abstract subject for a fourth form pupil is a *tall order* (difficult of treatment). It is quite *the go in the city* (in fashion). *It's no go* (nothing can be done). Such a plan can't *get any forrader* (make any progress). *It's me* (for it is I). He is the only man *in the know* about the matter (who knows about it).

V. THE ESTABLISHED FORM OF USAGE

10. The order of words in an idiom or established usage should on no account be disturbed. Only a foreigner is apt to disturb the established form:—He is a man of his word (not *words*); he has an old head on young shoulders (not *carries* an old head over etc.); he was very disappointed, but soon took *heart* (not, took up his heart); he

is living from hand to mouth (not, 'from his hand to his mouth'.)

VI. LAPSES IN IDIOM

11. Similarly we should not say, 'Mr. Mudaliar contested for a seat in the council' ('contested a seat' or 'contended for a seat'). Do not say, 'Myself did it' for 'I did it'. 'He is the first man to do it' is incorrect for 'he is the first to do it'. 'When did you see him *at first*?' needs to be corrected into 'when did you see him *first*?' 'My heart misgives' should be corrected to 'my heart misgives me.'

12. Just as we should say 'The Rev. J.H. Maclean', and not Reverend Maclean, so we should say Sir C. P. Ramaswami, or Sir Pattabhirama Ramaswami, or Sir Pattabhirama, and not Sir Ramaswami.

VII. METHOD OF TEACHING STANDARD ENGLISH

13. The only effective way of teaching standard or established forms of expression, that is suggested by experience is the employment of both positive and negative methods. That is, the teacher must teach his pupils to use an idiom correctly and not to misuse it. He will do well to start with the idioms found in the pupils' class text and proceed to explain and illustrate others closely connected with them, for instance, in explaining the use of 'look at,' he may also explain and illustrate that of 'look into.' This method will help to enlarge the vocabulary or stock of expressions already known to the pupil. Having taught a certain number of idiomatic expressions, the teacher will do well to require his pupils to frame sentences of their own containing them and also to correct given sentences in which they are misused.

14. The usual trite method of setting questions of the type of 'Correct the errors in the following' is exceptionable for the reason that the pupils are told beforehand

that the sentences are faulty. It should on the other hand be left to the pupils to detect the errors of their own accord. The teacher is therefore recommended to fashion his questions so as to stimulate the pupils' thought. And this purpose will be served by questions of the type of 'Are the follow-

ing sentences correct? If not, point out and correct the errors in them with reasons'. In suggesting this, I do not aspire to get credit for a new suggestion. I only wish to tell my friends and fellow-teachers that I have tried this method and found it effectual.

SCHOOL BROADCASTS IN BRITAIN

BY RHODA POWER, *well-known broadcaster, history teacher and dramatist*

WAR brought many changes and presented complex problems to the schools-broadcasting department of the B.B.C. which, since its inception, has played an increasingly important part in the education of the children and youth of Britain.

Officials in charge of school broadcasting had their problems as well as the over-worked teachers. The schools, which had registered as listeners and were normally sent annual programmes, book-lists, and illustrated pamphlets, were now scattered as a result of evacuation against air raids, and failed to notify their changes of address, or had amalgamated with schools not as yet radio-minded.

And so war-time conditions demanded a rather different radio technique where less knowledge in the classroom must be assumed, a smaller degree of concentration, no visual aids, a greater nervous strain, and children ranging in age from eight to 14 possibly listening at the same time.

Now in the fifth year of the war the number of listening schools in Britain is higher than ever before, because teachers realise that radio can break down the classroom walls.

School broadcast periods are now from 11 A.M. to 12 noon, and from 1.50 P.M. to 3 P.M., with a children's news commentary every morning from 10.05 to 10.10 A.M. and a Religious Service twice a week.

The average classroom lesson takes from half an hour to 40 minutes but the broadcast is timed for 20 minutes so that teachers who wish to do so can plan their curriculum round the radio lesson and have time for the preparation and follow-up which enhance its value. An annual programme is distributed every summer to teachers who apply for it. A detailed schedule is sent out at the beginning of every term. But the shortage of paper prevents the publication of pamphlets which were a feature of pre-war broadcasting. They were lavishly illustrated and contained the teaching points which were to emerge from the broadcast, book-lists, and suggestions for preparation and for follow-up.

Courses of proved popularity appear annually with subject and treatment changing each year. Among these are the famous Music and Movement series, general science and nature study, orchestral concerts, travel talks of first hand experience in foreign lands, junior and senior English and history, dramatised lessons specially arranged for rural schools, physical training for playground and classroom, and, in "How Things Began" the B.B.C. Observer from the Past whose running commentaries of life in the ice-age, etc., are dramatic lessons in pre-history.

But school broadcasting must sense what is wanted when the demand is not necessarily voiced. The children of Britain are

keenly alive to what is going on today. They listen with a sense of reality to foreign speakers who can talk intimately of their own countries. They respond eagerly to the course broadcast on Current Events by experts who know how to talk simply, and by airmen, seamen, soldiers and refugees who have firsthand experience to relate. Today the meaning of democracy and the responsibilities of citizenship are being brought home as never before. Practical

information on citizenship has also found a place in the time-table. "When You Leave School," a series of talks by a leader of the Youth Movement, illustrated by dramatised interludes, was designed to help older children.

And so the work goes on, its purpose unaffected by the war, its aim still to provide something which the teacher himself cannot give, and in particular, to supplement the classroom lesson on the imaginative side.

LIBRARY AND THE EDUCATION OF THE WHOLE MAN

3. EMOTION AND ITS REFINEMENT.

By RAO SABIB S. R. RANGANATHAN, M.A., L.T., F. L. A., *Librarian, University Library, Madras, and Secretary, Madras Library Association*

MAN'S happiness demands not only enrichment of memory and cultivation of intellect but also refinement of emotion. Here again imitation plays a considerable part. The family and the community were adequate means up to a time. Beyond that, the formal school had to be pressed into service. But the further refinement of emotion can be helped a good deal by the library. That is because of the successive improvements made in the art of book-production since the invention of printing.

The field that corresponds to emotional development is called Fine Arts. Its highest and most human form is, beyond doubt, literature. The canvass, so to speak, of this form of fine arts is human speech. It was this form of fine arts, therefore, that was first brought within easy reach of one and all by the invention of printing. To read the words in cold print and capture the full aesthetic joy is not as easy as when one could hear the poet himself or any other expounder who could re-live the poets before us. That is why the modern library has developed (on its extension side) reading circles. It provides facilities for

readers to meet in small groups with able exponents of literature as leaders. The library is prepared to do all secretarial work connected with such reading circles, send notices of meetings, provide the room for the meeting, assemble the literature required for demonstration and follow up the meeting by distributing suitable literature among the members for quiet enjoyment in the privacy of their own homes.

The schools too recognise the potentiality of the library as a fourth means for refinement of emotion through literature and spend time in accustoming pupils to the mode of capturing the mood of the poet and deriving joy therefrom by a perusal of the printed words of the poets.

In recent years, printing has extended its sphere far beyond the field of words. The technique of reproducing in print masterpieces of painting, sculpture and architecture has, in recent years, made great strides. The technique not only makes the reproductions approximate to the originals to an uncanny degree, but also reduces the cost so much that masterpieces of these plastic arts are now within the easy reach of the public

libraries of every town and rural unit. In the earlier days, galleries of original works of art could be had only in each national centre. This meant that the majority of the citizens of a nation could have no chance of enjoying them. But the service rendered by the modern processes in printing has fitted public libraries to play no small part in the aesthetic education of one and all. The modern library makes collections of art-books for the purpose. It arranges for periodical exhibitions in art. It cooperates with local art societies and enlists the services of competent members of such bodies to act as honorary guides and interpreters in such exhibitions in addition to selecting and arranging the exhibits in the most effective way.

Printing has brought even music within its jurisdiction and has thus made it possible for libraries to help the refinement of emotion by the free distribution of printed music. Once printed music is collected by a library, it is obliged to see that it is widely distributed. For every book that refuses to leave the shelves of the library is a curse on the library profession according to the present outlook. The library is, thus, brought to the predicament symbolised by the old saw :

कौपीनसंरक्षणार्थं इमं पट्टटोपः ।

All this add to save the loin cloth. To help the printed music reach readers' hands which are their destiny, the modern library collects gramophone records as extension materials and demonstrates with them. It arranges for musical evenings. It befriends the local Musical Society and cooperates with it in furthering the musical education of its clientele.

Apart from the part that the modern library has thus come to play in the refinement of the subtler emotions of man it is also organising itself as a community centre where the citizens can get the necessary emotional satisfaction on days of national festivals, religious observance, social fete and so on. The help that the modern

library thus renders in the refinement of emotions such as patriotism, religious fervour and other forms of group-emotion is a bye-product of its anxiety to so exploit every occasion that induces curiosity and enthusiasm in men as to make it a means to attract them to itself so as to increase the chance for the books on its shelves to find suitable readers.

The library profession has yet to weave such stray activities into an organic whole and see what it can do for the refinement of emotion in a more systematic way and how it can help the education of the whole man on the emotional side as well.

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THE ARYAN SYSTEM OF EDUCATION

BY SRI M. B. NARASIMHA IYENGAR, M.Sc., Bangalore

THE four castes of the Aryans are (1) the *Brahmins* or the priestly class, (2) the *Kshatriyas* or the warrior or the ruling class, (3) the *Vaisyas* or the agriculturists, the traders and dairy farmers and (4) the *Sudras* or the menials and labourers. Of these the first three are said to be of pure Aryan blood. In the last class we find an admixture of various races and creeds. The *Sudras* are said to comprise (a) the non-Aryan tribes taken into the Aryan fold, who were not willing to give up their non-Aryan customs, (b) the Aryans, who imitated the non-Aryans and did not live up to the level of the Aryan standards and (c) the Aryans who married non-Aryans and submerged themselves in the non-Aryan races. The intermixture of races was held to have produced the various *anuloma* castes (i.e. those born of a high caste father and a low caste mother) and *pratiloma* ones (i.e. those born of low-caste father and a high-caste mother). The *pratiloma* castes were given the status of untouchables and only for the purpose of the administration of civil and criminal laws, they are classified as *Sudras*.

The education among the Aryans was intended for those of pure blood. The Aryans did not like their art of learning to be used by the non-Aryans. The *Rakshasas*, at least some of them, did study the *Vedas*, and they made use of the same in order to create confusion among the Aryans. They carried away the Aryan womanfolk. They destroyed the places where periodical sacrifices were held. There were also some local customs that were obnoxious to the Aryans.

Before the boys of the three higher castes are taught the *Vedas* and the other branches of learning, they have to undergo the ceremony of initiation. This is called *upanayanam*. The *upanayanam* of the

Brahmin boy is to take place in his eighth year, that of the *kshatriya* boy in the eleventh year and that of the *vaisya* boy in the twelfth year. It is suggested in the code of laws that the *Brahmins* perform the *upanayanam* of their boys in the eighth year, as they desire prosperity and long life to themselves and to the world at large. The *kshatriyas* aspire for fame and wealth. Hence they perform the ceremony in the eleventh year. The main occupation of *vaisyas* is agriculture, trade and dairy-farming. And it is mainly dependent on cows and bullocks. As these *vaisyas* desire the prosperity of cows and bullocks, the *upanayanam* in their caste is performed in the twelfth year.

After this ceremony of initiation, the boy was sent to the teacher's house for his studies. There were no schools or colleges. There were no laboratories. Where there was the teacher, there were the students. The teacher generally collected around him a number of pupils and taught them all the branches of learning. The number of students depended upon the ability of the teacher to handle them.

The teacher will be that person who teaches the boy on the day of the *upanayanam* the sacred hymn of *gayatri*. If he is absent or dead his brother is the fit person to be the master. In the event of the teacher having no brother or brothers, the duty of teaching devolves on the other agnates of the family. But one main consideration is that the teacher should belong, as far as possible, to the family of that person who taught the pupil the sacred hymn of *gayatri* on the first day.

The maximum period prescribed for the studies in the master's house is forty-eight years and the minimum is only twelve. But there were certain extraordinary boys

of the type of Svetaketu, who could master all the branches of learning in as short a time as possible. There were also certain students who by the grace of the teacher or by the grace of certain gods or demi-gods became well-versed in all the branches of learning. Of this class were Aruni Panchala and Upamanyu. The former became a well-educated person through the grace of his teacher, Ayoda Dhomya. The latter became a great person through the grace of the twin gods, the Asvins. This Upamanyu is asked, when he is in distress, to seek the succour of the Asvins by his teacher, Dhomyu [Mahabharata Adiparvan, Chapter III].

The school begins on the *upakarma* day. The *Rigvedins* and the *Yajurvedins* perform the *upakarma* in the month of *Shravan*, when the sun is in the constellation *Leo*. The *Samavedins* have their *upakarma* on the *Ganesa-chaturti* day or a day previous to that day, when the moon is in the constellation *Hasta*. The school runs from four to four and a half months. The last day is either the day in which the moon is full moon in the month of *Pushya* or the day in which the moon is in the constellation, *Alderbaran*, in the month of *Pushya*, whichever is earlier.

The maximum age prescribed for the *upanayanam* is sixteen years in the case of the Brahmin, twenty-two in the case of the *Kshatriya* and twenty-four in the case of the *Vaisya*. When a boy is initiated by the ceremony of *upanayanam* late in life he must undergo certain ceremonies prescribed by rules and regulations in order to cleanse himself from all sins. Those who suffer from dumbness and idiocy should not be initiated. If these disqualifications disappear within the age prescribed above, then only could the *upanayanam* of the boy be performed.

The student, as long as he is in his teacher's house, must get his livelihood by begging cooked food from the houses of his neighbours. He must not, on any account,

beg in his teacher's house or in that of any other relation of his master. And he must not go abegging into the house of his relatives lest they should scoff at him. The cooked food must be taken always in a vessel made either of clay or of any metal. He must not collect more food than what is actually required for him. By inadvertance if he collects food not required for him, then he must either throw it into water or bury it deep in the ground. Or he may present it to a boy, whose *upanayanam* has not yet been performed or he may present it to a *Sudra* late in the day.

Before he partakes of his meal, he must take the consent of his master. If his teacher is absent he must seek the permission of his wife. In her absence he must approach any male member of his teacher's family to grant him the necessary consent. If his teacher appropriates the cooked food for himself, he must again go abegging in the streets for the same. On no account is the pupil allowed to take his meals without the consent of his master. It is even said of Upamanyu that, as his teacher did not permit him to go abegging, he ate, while he was extremely hungry, some herbs that made him blind. [Mahabharata, Adiparvan, Chapter III].

The pupil must attend to the daily necessities of his master's household. He must bring daily from the forest firewood, the *kusa* grass, and also the *samit*, or the fire-producing sticks. In those days, a certain portion of the land, not exceeding one-fourth of the available land, was set apart for the common enjoyment of the people living round about. These lands abounded in large quantities of these necessities of life.

The day was divided into five parts and the second part was entirely devoted to studies. The school did not run on all days. The pupils were given certain holidays. They were (i) the new moon and full moon days and the days immediately succeeding and preceding them; (ii) the eighth day after

the new moon or the full moon, (iii) rainy days marked by thunder, lightning and thunder-bolts and (iv) days of religious festivals.

Certain rules were prescribed for the studies. The *Vedas* should not be studied (1) in streets, (2) in burial and execution grounds, (3) in burial grounds later converted into villages, (4) in the presence of *Sudras* and other 'low' castes, especially *pratiloma* ones, (5) in the presence of men of higher castes, who have given up the customs and manners of their community and who have fallen low in the general estimate, (6) in the presence of corpses so long as the corpses are not removed from the village, (7) in twilight, (8) when fire is raging in a part of the village, (9) when thieves and robbers are harassing the village, (10) when riding on horses, and elephants etc., (11) during earthquakes, (12) in the presence of the rainbow (13) when the jackals cry, the dogs bark and the owls hoot.

Certain rules were prescribed for proper observance by the pupils. Some of them are here given. (1) Truth must be spoken. (2) The pupil must do his duty consistently with God's plan and purpose in life. He must not shirk responsibility for work. (3) He must obey the commands of his teacher. (4) He must not speak ill of his master. (5) He must sit or sleep on the floor. (6) He must not eat food that is set apart for ceremonial offerings and 'for the gods'. (7) He must not sleep in the day. (8) He must not smear his body with sandal paste. (9) He must not beautify his face by using face-powder or 'snow'. (10) He must observe perfect continence. (11) He must not eat salt, honey, and meat. (12) He must not swim in water. (13) He must not clean his face alone by water. He must pour water on his head and must clean his whole body. (14) He must not attend dancing parties. (15) He must not visit gambling dens. (16) He must not attend big congregations held in certain festivals. (17) He must not take part in the

local gossip. (18) He must not remain in the place where his teacher is. (19) He must talk with women only to the point. (20) He must not look into the faces of women. (21) He must have patience. (22) He must have a good control over his senses. (23) He must meet calamities and pleasures with courage. (24) He must not display his anger on any occasion. (25) He must not be avaricious. (26) He must not laugh. If at all he laughs he must cover his mouth with cloth. (27) He must not wear finery. He must not hold an umbrella in his hand. (28) He must not hold flowers in his hand and smell them.

The pupil must live in his master's house till he completes his education. His teacher must give him permission to leave him and lead a married life. Only then can a teacher ask his pupil to pay him the cost of his education. Sometimes the pupil gets away by making a small present. On certain occasions the teachers impose impossible conditions on their students. Visvamitra asked his student, Galava, to procure for him as *gurudakshina* one thousand horses, whose colour was white but with one of their ears black. This condition was impossible of fulfilment and Galava, assisted by his friend, Garuda, approached various kings. He was able to secure only eight hundred horses. He was forced to hand over the daughter of Yayati to his teacher for the balance of the two hundred horses. Visvamitra had a son by her. Then he returned the girl to Galava, who in turn sent her away to her father's house.

The story of Udanka is not forgotten by us. His teacher does not ask for any presents. But his master's wife asks for the ear-rings of King Poushya. Udauka finds it hard to procure the same. But in the course of his wanderings he has to fight with Vasuki, the serpent king, for the possession of the same. Indra helps him in his distress and he succeeds in restoring the ear-rings to the consort of his teacher.

The teacher gives permission to his pupil to lead a married life, as he has completed his education. The student is not permitted to waste his time without marrying a girl suited to his taste.

But his education will not be complete, unless he makes a tour of his country on foot. After marriage and before he settles down in his life, he makes a tour of the

world. He visits all the important places. He studies men, and their manners and customs. After his return from his journey, he sets up his home with his wife. If he is successful he will have around him a number of pupils eager to learn the various arts under his feet.

Thus went on the cycle of pupils and teachers.

SOME TRICK QUESTIONS IN ARITHMETIC

THE *Manitoba Teacher* publishes some interesting questions in arithmetic which are not too difficult. They were devised by Mr. G.E. Pentland, of Hanover. Here they are:

1. Had you asked me the day before yesterday, how old I was I would have replied that I was 19. Some time next year I will be 22. When is my birthday?

2. What is the difference between three miles, and two miles, 119 rods, five yards, seven inches?

3. A chicken weighs two-thirds of its own weight and two-thirds of a pound. How heavy is it?

4. A snail climbs up a pole 12 feet high. It goes up three feet each day and slips back two feet each night. At the end of how many days will it be at the top of the pole?

5. If three hens lay three eggs in three days, how many such hens will lay 100 eggs in 100 days?

6. Mary is 24 years old. Mary is twice as old as Ann was when Mary was as old as Ann is now. How old is Ann?

7. A boy said: "I have as many brothers as I have sisters." His sisters said: "I have twice as many brothers as I have sisters." How many boys and how many girls are there in the family?

8. A man sold half of his pigs and a pig more. He then sold half of what he had left and half a pig more. He then had none left. How many had he at first?

9. A man sold a horse for \$56. The number of dollars the horse cost is the same number as the per cent profit. How much did the horse cost?

10. A fish is 15 inches long. The head is as long as the tail, but if the head were twice as long as it is, the head and tail would be as long as the body. How long is each?

—*The Schoolmaster and Woman Teachers' Chronicle*, June 24, 1943.

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BOOK REVIEWS

THE CONTRIBUTION OF HINDU LAW TO WORLD JURISPRUDENCE. (SECOND REVISED AND ENLARGED EDITION). A.S. PANCHAPAKESA AYYAR, M.A., I.C.S., F.R.S.L., BAR-AT-LAW. (THE MADRAS LAW JOURNAL OFFICE, MYLAPORE, MADRAS, 1943. PP. 103. PRICE Rs. 1.8-0.)

This is the second edition, enlarged and revised, of the versatile author's estimate of the contribution of Hindu Law to world jurisprudence. This contribution has been very valuable, because the Hindu theory of jurisprudence differs from that of other countries and comprehends the activity of man in society throughout his life. Consequently its base has been held to be the Word of God and supplementary sources of law and conduct have been ascertained from the work of prophets and great teachers, men of good conduct, and rules of the community and caste, each one of these sources being considered supplementary to, but not so important as its predecessor. The chief end of Hindu Law was the ideal of *Dharma* which has got a scope of being that cannot be easily explained. *Danda*, or the rod of justice, is the sanction and embodies the spirit of punishment. It is also of divine creation. Everything is evaluated from the standard of eternal justice and *Dharma*. Justice has always to be meted out to wrong-doers, and according to Hindu concepts there could be no limitation of time against crime. *Dharma* differs according to circumstances, places and times, because it is the innate principle of the justice of everything.

Mr. Aiyar holds that the caste system is not an essential element for *Dharma*, though it has attained a prominent place in its development. The fiction of custom being regarded as part of scriptural law, which is an old trait of Hindu jurisprudence, has altogether worked for the creation of social harmony and solidarity. Hindu law

naturally took account of quibbles and comprehended methods of overcoming them. The king's duties towards the people and towards *Dharma* naturally became the basis and starting point of what may be regarded as constitutional law, and, if we can use a modern analogy, sovereignty may be held to rest only with God, though its actual exercise had to be transferred to the king and the people. Legal fiction did play some part in Hindu jurisprudence. The distinction was always maintained between moral and legal rights, between primary and sanctioning rights and between rights proper and mere liberties. Rights and duties of *jus commercium* have always been clearly indicated and the claim is put forth that Hindu Law, though it has become atrophied in parts, has had an equally strong, perhaps stronger hold on world civilisation than Roman Law. The pleasing and flowing manner in which the narrative runs is characteristic of the author's facile and forceful presentation of any subject that he chooses to take up.

VOLTAIRE'S FRAGMENTS ON INDIA. TRANSLATED BY FREDA BEDI, B.A. HONS. (OXON.) (CONTEMPORARY INDIA PUBLICATION), LAHORE. PP. X and 90.

The authoress translated a small collection of essays which her husband found in the Oriental Section of the State Library in Berlin, entitled 'Fragments sur L'Inde' which she learnt to be from the pen of Voltaire, and which should have been culled from the collected works of that great man. The book is not very valuable as History, because it is mostly drawn from second-hand sources available at the time. The translation of the *Fragments* has been done in order to afford to the Indian reader an acute and intensely personal summary of Indian affairs in the 18th century as observed by a great French writer and satirist.

Of the 20 chapters into which the book is divided, several are devoted to Count Lally, the unfortunate instrument for the ruin of an unfortunate company and of its prospective dominions. Lally is presented, on the whole, as a man more sinned against than sinning. The fatuity of his operations against Fort St. David, Tanjore and Madras was well known to his French colleagues in India and to himself also. But then there was his zeal and passion which far outran realism. As Voltaire effectively put it, nobody pardoned him for being unfortunate and everybody insulted him and raged against him. The fate of Pondicherry was sealed even before the beginning of the siege operations that lasted for over a year (1760-1). Voltaire says that the Missionaries and the Jesuits had their fingers in every pie and their noses in everything and describes the personalities and doings of two among them, the pseudo-Bishop Noronha of Halicarnassus and the Jesuit Father Lavour of Pondicherry. The execution of Lally did not revive the French Company which had been periodically aroused into activity with great hope. Thus Voltaire writes as to the chances of the English expanding their power in India, because even he could not then perceive that they had practically assured themselves of empire when once they had got rid of their European rival. "Only time can teach ... what will happen to the English Company ... whether it will establish its power in Bengal and on the Coromandel Coast as the Dutch had done in Batavia or whether the Mahrattas and the Pathans prove too warlike for them and prevail, whether England will dominate India as it is dominating North America."

The few notes on the condition of the peninsula and on the features of life of the Hindus do not possess any particular value for us. Voltaire does not spare words in condemning the unproductive character of trade with India and the East which he says was merely to provide the rich with luxuries and was carried on always with disadvantage to three-quarters of Europe. His treat-

ment of the principal characters of French enterprise in India has a vividness and vitality that is usually lacking in historical narratives. The translator has carefully given the modern equivalents of place names etc., coming in, [except Changanor and Syringam], which are easily grasped by a South Indian scholar. We are happy that this addition has been made to the literature on the history of early European Imperialism in India.

LIFE IN THE GUPTA AGE. BY RAJARAM NARAYANA SALETORÉ, M. A., PH. D., (THE POPULAR BOOK DEPOT), LAMINGTON ROAD, BOMBAY 7, 1943. PP. L AND 623. PRICE RS. 15.

The object of this book is to present a complete account of the life of the people in the Gupta age, bringing the lower end of that age to about 750 A.D. and comprehending also the age of the chief feudatory and contemporary powers of the times like the Vakatakas, the Maukharis and the Pushabhutis. The documentation is very extensive and covers all the important fields of popular activity and includes for the sake of proper perspective the *Arthashastra* of Kautilya and inscriptions of the Kushanas and Sakas.

The first chapter deals with the chronological and other problems connected with the political history of the period under survey. The second chapter on the life of the people covers nearly 70 pages and embraces such minute phases of popular activity, like the use of the water-clock, the antiquity of which is traced to Mauryan times and the use of which is referred to in Gupta inscriptions. The lunar calendar was generally followed and it is inferred that the general practice must have been to reckon each day from the rising of the full moon. Inscriptional evidence shows that women too indulged in intoxicants; and there is reference in literature to the Brah-

mans tasting wine. Of more significance is the section on maritime activity manifest in the Gupta age.

The next chapter deals with court life wherein stress is laid on the coronation and consecration rites, on the symbols of sovereignty, on the association of women guards and servants with the court and on the elaborate organisation of the royal seraglio, which recalls to the mind of the reader some phases of the harem of the Ottoman Sultans described by Mr. Penzer. It is held that the custom of *sati* came into general vogue with the rise of the Guptas though its origin can be traced back to much earlier times.

The chapter on administration is prefaced with an outline of the pre-Gupta system. The polity of the Gupta Age is studied in the light of Smriti literature, the influence of which is held to be reflected in the epigraphs of the period. Kingship was almost transformed into Godhead and was regarded as the embodiment of divine justice. According to Narada, "whatever a king does is right, that is a settled rule, because the protection of the world is entrusted to him. A ruler though worthless must be worshipped by his subjects." The *Smritikaras* have given elaborate accounts of exemplary judicial procedure. Consistent with the supreme position of the king were the titles assumed by him as seen in the epigraphs, some of which were evidently symbols of paramount sovereignty. It is held here that his power was absolute and that all the land was virtually State property; naturally this concept implied the power of the king to make gifts of it to any one he chose.

On the whole the provincial administration is proved to have a political continuity for definitely two centuries of Gupta sovereignty from the time of Kumara Gupta I. Village officers formed a recognised element of the local administration; the office of the *Asthakuladhikarana* about which there has been a variety of opinions is explained as an official supervisor or a representative of

eight families, which probably constituted the village. Some of the Gupta seals reveal the working of committees or Panchayats. On the whole the influences of the Gupta system of administration are shown to have persisted through four centuries, chiefly as a result of political contracts, with the early Kalachurias, the Rashtrakutas, the Chalukyas and the Somavamsi kings of Kataka. The units of local administration in the Eastern and Central Provinces of the Empire and also in the western parts are described under their particular designations and illustrated in their differences by a tabular statement.

The chapter on land, labour and corporate organisation is likewise based on a careful study both of the epigraphs and Smriti literature. Even a perpetual grant of land did not imply that the State could not resume the lands so bestowed; and the evidence inferable from inscriptions may be held to maintain that the State probably resumed lands once given. The practice of sealing letters, records etc., was in wide vogue and was prevalent among mercantile Corporations as a matter of routine. The trade routes of the age both by land and by water, the coinage of the successive rulers of the dynasty and its symbolism, particularly of the earlier rulers, is the last part of this chapter. Fine Arts comprehend a study of the costumes, coiffures, cosmetics and ornaments in vogue among the different strata of the population. Gupta architecture is detailed in its specialised features like the typical Gupta roof, the *Sikara*, and its influences which were widespread, are all noted. Sculpture including iconography, painting, music, drama, dancing—these receive some treatment and are supplemented by a notice of the poets, chroniclers and literary figures, including philosophers and grammarians and logicians, Baudhdha, Jaina and Brahmanic.

The last chapter deals with religion. The growth of Bhagavatism, the development of Saivism, particularly in the more fiery aspects of its cult like Mahakala worship, the sun-cult, the lingering influence of

Buddhism and its internal controversies, the features of Jainism which developed in vitality till about the 8th century, these are all detailed in proportionate measure. An attempt is made to interpret some features of Gupta symbolism from the point of view of the *Puranas*, some of which may not seem to be fully valid. Religious institutions like Brahman Agraharas, Jaina Orders and Vihara life and the great Buddhist Sangharamas, including the famous monastery of Nalanda and its elaborate organisation and academic activity are the subject matter of the last chapter.

We congratulate the author on his thorough work which is a very clear presentation of the life and institutions of the people during a most fruitful period in India's past.

PICTURE ENGLISH BY W.J. GLOVER, BOOKS I TO IV, EACH IN TWO GRADES A & B. I A & I-B, 32 PAGES EACH, 8/1; II A & B, 40 PAGES EACH, 9d; III A & III B, 48 PAGES EACH, 11d; IV A & IV B, 56 PAGES EACH, 1 sh 1d. GEORGE PHELIP & SON, LTD., LONDON (AGENTS IN INDIA: LONGMANS GREEN & Co.)

CHILDREN'S PICTURE COMPOSITION BY V.N. GONDHALEKAR. TEACHER OF ENGLISH, N.M.V. HIGH SCHOOL, POONA. WITH A FOREWORD BY PROF N.G. NARALKAR M.A., L.T. SECOND EDITION REVISED. BOOKS I TO V, EACH 32 PAGES, AS 4.

According to the Hadow Report, "the aim of English teaching between the ages of 7 and 11 years is the formation of correct habits of speaking and writing." As regards their written work, the Board of Education in England has made the suggestion that "before the children of this age can be expected to find the ideas and also the language for their written composition they should be given subjects in which the ideas, and as a rule, the language too, are more or less ready to their hand, so that their early task is mainly one of arrangement and selec-

tion." In other words, the pupils must be given habitual drill in imitating correct spoken and written English.

Such drill is even more important for the children in India, as their mother-tongue is not English. Picture composition is one of the recognised means for achieving this end 'Picture English' by Mr. W.G. Glover provides a simple approach to composition which will appeal to children on account of the attractive and intelligible pictures on which it is based. It is assumed that each set of lessons will be preceded in the early books by oral composition and instruction in the use of punctuation marks; and in the later books on sentence construction based on simple grammatical rules. The fourth book provides elementary instruction in grammar by including studies on the simple structure of sentences as well as on number, person and tense. The books are edited in pairs, labelled A and B, of which B is the simpler and can be used as preparatory to A. We have no doubt that this excellent series, though designed primarily for use in England, will prove useful aids for teaching English here in India also. The get-up and the printing are attractive and leave nothing to be desired.

Mr. Gondhalekar's books on picture composition have been specially prepared to meet the needs of Indian students. The pictures show an environment familiar to the pupils. In the earlier books, each picture has attached to it a series of questions, and the pupils are asked to answer them with the help of new words and phrases, printed below the picture. The sentence-form for the answer is suggested by the question itself. In the later books, the 'paragraph' method is followed. "The child is asked to construct sentences with the help of the new words and phrases incorporated in the points, grouped under suitable headings so that the piece of composition obtained will be suitably divided into paragraphs." We have great pleasure in inviting the attention of teachers of English in our Schools to these books.

STUDENTS IN THE U. S. S. R.

Educational Developments

MUCH attention has recently been given by the Soviet Press and radio to the progress of higher education in the Soviet Union.

An article in *Pravda* by Kaftanov, chairman of the Soviet Government Committee for Higher Education, gives some significant figures showing the work of Soviet universities and technical training institutes during the past five years. In this period 477,000 young specialists have graduated, including over 100,000 in engineering, 40,000 in agriculture, 187,000 teachers and educational specialists, and 80,000 doctors. During the past five years 12,400 new lecturers and professors have joined the staffs of Soviet universities and 19,000 post-graduate degrees have been awarded, while during the war the universities have provided about 200,000 engineers, doctors, teachers supply and communications experts, commanders and political workers for the Red Army.

The programme of medical training provides for the enrolment of 20,000 new students this year, and the Moscow "Stalin" Institute for Steel is being expanded in view of the number of applications received this year, which is several times higher than in 1942. Additional equipment for the laboratories has been provided and a large farm has been acquired to augment the students' food supplies.

State funds allocated for the construction of new schools, universities, museums, and libraries are twice as great as last year. Not only have almost all higher educational institutions which functioned prior to the war continued their work, but in addition 29 new institutions of higher learning and 15,000 primary and secondary schools have been opened since the war began. These include four teachers' training colleges, three

industrial institutes, and two institutes for the natural sciences, founded in the once backward republics of Kirghizia, Kazakhstan, Uzbekistan and Turkmenia. The teachers' training programme of the Turkmenian Republic (which extends from the east coast of the Caspian Sea to the Afghan border) provides for the graduation of 2,300 women secondary school teachers. This year 200 new primary and secondary schools will be opened in the Soviet Far North. There, as everywhere in the Soviet Union, children are instructed in their mother tongues by teachers of their own nationality.

The restoration of cultural institutions is well under way in districts recently liberated from the Germans, where, in the first three months of this year, over 800 primary and secondary schools, 12 institutes, and over 800 clubs were re-established.

—*The Times Educational Supplement*,
June 26, 1943.

PAUL BRUNTON ON TEA

In his well-known book entitled "A Hermit in the Himalayas," published in India a few years ago, Mr. Paul Brunton writes:

"'Tis a harmless pleasure this of tea drinking. What more refreshing in the morning than a cupful? What more useful to the writing man who tries to work at his pages during the calm hours of the night; how else may he repel sleep so effectively?"

"And now I must sit down to another cup of the 'nectar of the gods' as some Oriental person called it, coupled with a slice of toast, and let its delicious warmth flow through my body, lighten my brain, and cheer my heart the while a fragrant aroma ascends from the crinkled leaves."

SHAKESPEARE'S PLAYS

The following Plays of Shakespeare have been edited under the general editorship of the late REV. F. W. KELLETT, M.A., Professor of History and Political Economy, Christian College, Madras, and Fellow of the University of Madras:—

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EDITORIAL NOTES

I

SOVIET science has enabled Stalin to keep production at its proper level and to feed the army engaged against the Germans continuously both with food and with weapons. Even before the Bolshevik Government came into being, the Academy of Sciences of Russia was a body with a good record to its credit. It has now greatly expanded. Its three sections have increased to 8; viz., Physics and Mathematics, Chemistry, Geology and Geography, Biology, Technical Sciences, History and Philosophy and Economics, Law and Literature. Besides this Central Academy, the Ukraine, White Russia and Georgia have important scientific academies. There are branches of the Central Academy functioning in the Union Republics of Azerbaijan, Armenia, Kazakhstan, Turkmenistan, Uzbekistan and Kirghizia. There are also special branches of science like Agriculture, Architecture and Pedagogy, to which highly equipped and specialised Academies under the patronage of Moscow are devoted.

The scientists are intimately associated with the reconstruction of the country's economic and cultural life on a modern scientific basis. Since the war began, a Commission of Scientists has been working in the Urals on the general, but most vital, problem of increasing the production of that region and mobilising its resources for defence. Planning is done always on a most scientific basis. The scientists may be held to form a special brigade of the U.S.S.R. army of defence, as it were. Pure science is not neglected either and much theoretical work has been put forth in Mathematics, Astronomy, Physics and History. While the individuality of the scientists is not injured, their out-turn in groups and collective institutes has become very marked. Collective undertakings and investigations

are most in evidence. In the words of M. Derzhavin, Member, U.S.S.R. Academy of Sciences; "some of those whose creative work has developed under the Soviet power, are the mathematician, Ivan Vinogradov; the physicist, Vavilov and the world-famous chemist, Nikolai Semenov. Peter Kapitsa, the physicist well-known abroad, belongs to the same generation. The creative talents of the older generation of scientists have also developed considerably during the years of the Soviet power. Geographers who have done so much to study the hitherto unexplored lands and seas, physiologists who have developed Pavlov's teachings, geologists who, for 26 years, have been making a thorough study of the mineral wealth in the earth's surface, botanists, chemists, physicists and others have all been working fruitfully for the advancement of science.

"The words of the poet 'You may be no poet, but citizen you must be' are 'winged words' amongst the Soviet people, and express the honour attached to civic duty; they are equally applicable to the scientists who place the interests of their country above all else. The leading Russian scientists have always been ardent patriots, and they loyally serve their country."

II

We welcome the proposed introduction of a fairly intensive scheme of adult education under the auspices of

A Scheme of Adult Education at the Annamalai University. The scheme is based upon the organisation of University resources in vacation time towards the provision of tutorial guidance and instruction for a period of 4 to 6 weeks to about 100 or more adults, who will be comparatively free during the season of summer holidays. The instruction will be in Tamil and will involve the correction of composition exercises and essays besides a course of

regular instruction for about 4 hours in the morning and instruction in physical exercises, music etc. To quote the words of the proposed scheme itself: "The other method of the University organising adult education classes and courses in the University itself is the one that is practicable. It is also educationally the better way. The adult pupils would have the benefit of regular continuous instruction for a definite period. They would have the benefit of tutorial guidance, and they would profit by the great advantages of life in a residential University, i.e., education through social life. All the intellectual and social resources of the University would be open to them—its library, its laboratories, its playgrounds, its Music College, the Hostel etc."

A tentative list of subjects taught would be English, Tamil, Social and Political Science, Economics, Everyday Science, Botany or Zoology with special reference to Agriculture, Rural Sanitation, Hygiene etc. The instruction would be in Tamil and the experiment of University instruction in Tamil may well be begun in the Adult Education courses at the Annamalai University."

The scheme is an intensive though narrow one. It cannot benefit very large numbers. But the few that it teaches are bound to become really literate and attain rudiments of culture. Above all it is done largely at the expense of the University and at very little cost to public bodies.

III

The present war has proved that a nation's effort must be marked by total mobilisation and cultural mobilisation is as important as the military side of it. **China's Cultural Front during War.** It is the cultural effort that is perhaps a little more difficult to form into a single front and in which to display unity of thought and ideals. The Chinese Ministry of Education has been endeavouring to make the writers

conscious of uniformity of aim and also to form themselves into a uniform band so that their works and ideas may interpret clearly the ideals for China that the war stands for. Even playwrights, directors and actors engaged in the cinema trade must put their heart into the national cause. In the case of the journalists the duty is much more pressing. War-time novelists face the same difficulty and danger as the journalists do and their descriptive accounts of war-life should naturally have the same aim. The war should also become an inspiration to poets and the great epoch from which epic ideals may be freely drawn. Poets may be divided into two categories, from this point of view *viz.*, those who sing the war and those who sing for the war. The latter are of more immediate use, because they compile songs which are to be sung by soldiers, volunteers, wounded soldiers and others.

War-time poetry has got to be virile in its spirit and exhilarating in its effect on the fighting men. In China, according to Mr. Liu Yih-Ling, this war-time poetry has become the voice of *New China*. The Chinese Government is taking special care of the training of music teachers and in the ministry of education a special committee has been at work since 1940 for promoting singing with zeal and national purpose. Also conventional art has practically disappeared. The new pictures and woodcuts present war-affected life very faithfully and vividly and the artists themselves reveal intimate phases of life in the battle line. It is such an all-round intellectual equipment for war leading to an all-round cultural mobilisation that has marked China's efforts and the result is "that China's writers, poets, playwrights, journalists and artists, wage their war with pen and brush, which is no less implacable than what is waged by their comrades in arms." (These are the words of Mr. Liu-Yih Ling from whom we have quoted before.)

IV

The problems created by the advent of the industrial age in indebtedness and unemployment have been combated with several weapons of social effort. **Educational Effort for Social Work.** But the actual training of efficient and capable workers for the different kinds of social service remains a crying desideratum. This kind of training for social work should include, as has been stressed by experts like Dr. Kumarappa and his fellow-workers, many related fields, namely, medicine, law public health administration, sociology, economics, statistics, family relationships, child psychology, industrial conditions, etc. In 1926 there was opened in Bombay on the suggestion of Dr. Clifford Manshardt of Chicago, a professional school for social work by the trustees of the Sir Dorabji Tata Trust. Mr. Manshardt himself was put in charge of the Institute. The American system of training was adopted but with suitable modifications required for Indian conditions. The school admits only graduates, who possess the necessary poise and mental stability required for the work. It covers a two years' course and the teaching includes besides the subjects noted above, such other studies as Social Pathology, Hygiene and Sanitation, medical lectures for social workers, study of organisations for public welfare and juvenile and adult crime. This school aims primarily to give an understanding of the fundamental principles that are necessary in all branches of the profession of social service and of scientific methods of studying and investigating social problems. It is bound to give disinterested and trained workers and not half-formed fledgelings for this important work. There must be scientific training marking every worker in this most fruitful branch of national improvement work and we trust that every province will soon come to possess at least one such efficient training school for social service.

V

Language learning has become most important as its value has been in recent years most acutely realised, because it is the knowledge of the language used as the medium of teaching that enables the teacher to keep the interests of his pupils at a high pitch. The command of words, phrases and idioms always makes a most effective appeal to sense impressions. In the words of a high authority, "the complete fusion of sound and kinesthetic images with their appropriate meanings is after all the real essence of language learning." The teacher should call attention to cognates, synonyms, antonyms, etymological derivations of words and idioms. It is by means of such careful attention alone that language learning can be made to promote good thinking and to connote a body of facts and mental experience which would be most real to the student. Translation has been portrayed in its true value if properly developed by the same high authority to whom we have referred above—J. Mc Knight. Translation is not, however, promotive of the highest type of thinking, because it is only a crutch to be used until the pupil can walk for himself. Translation into another tongue may not and does not usually give the same body of facts, ideas and environment, which the original is strictly to convey. The accuracy that should accompany expression of ideas can be checked in language composition as rigidly as accuracy and sequence are tested in a problem in Algebra or Geometry. It is therefore most necessary that for teaching in languages of the areas, the teacher should be fitted by an effective course of training as rigorous as that which has been adopted so long for English expression and a rigorous course of instruction in any language should be expected of every teacher, whatever the special subject of his teaching might be in order that his ideas might be correctly expressed and accurately and adequately explained.

VI

Our poet Tagore organised at Shantiniketan a few years ago, on the model of the Boy Scouts of Lord Baden Powell the Brati Balak Dal, which is engaged in various social services, such as village uplift, the clearance of ponds, spread of education, prevention of malaria, nursing of the sick and wounded. Mr. G.S. Dutt founded a few years ago the Bratachari organisation which can claim credit as being the only true indigenous youth movement of the land. It is non-political and non-religious and though born in Bengal, can be expanded into an All-India organisation. The duties of youth are classed under five heads—knowledge, industry, truth, unity and happiness. A

Bratachari has to take up 16 vows, besides some extra ones and to observe certain prohibitions. He admits of evolution in life and he should develop character, sense of duty, powers of organisation and of co-operation. The youth movements in India so far as they have manifested themselves have not been very successful. The Bratachari movement promises a better move. We wish expanding success to it, particularly the realisation of its aims in the youth of the land. In the words of Mr. Dutt himself: "The Bratachari movement aims at the fulfilment of the ideals of service to society and through it of service to the whole world, culture of youthfulness and cheerfulness, full development of the body, liberation of the mind and observance of vows regarding character and duties."

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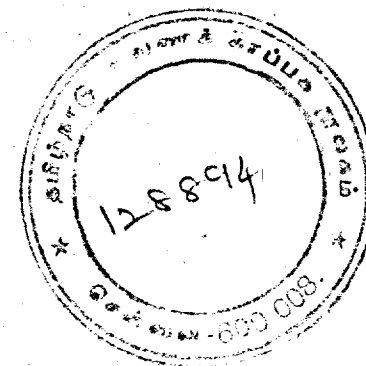
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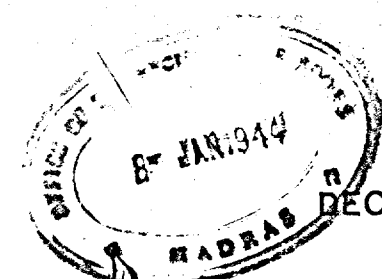
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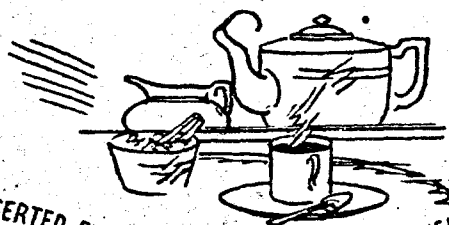
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OF TEA

The first cup moistens my lips and throat ;
 The second cup breaks my loneliness ;
 The third cup searches my barren entrail but
 to find therein some five thousand volumes
 of odd ideographs ;
 The fourth cup raises a slight perspiration —
 all the wrongs of life pass out through my
 pores ;
 At the fifth cup I am purified ;
 The sixth cup calls me to the realms of the im-
 mortals ;
 The seventh cup — ah, but I could take no
 more ! I only feel the breath of the cool
 wind that raises in my sleeves.
 Where is Elysium ? Let me ride on this sweet
 breeze and waft away thither.

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DECEMBER 1943

No. 12

RABINDRANATH AS A TEACHER

BY SRI SANTOSHKUMAR, DE, M. A. H. DIP. ED. (DUBLIN) *Headmaster, Municipal English High School, Burdwan.*

RABINDRANATH, the poet of Bengal, the poet of the world, the poet of all times to come is no more. Death in the form of a black night, with brow knit with worry and anxiety knocked at his door, again and again and at last has silenced the silver tongue of the great poet, philosopher and Rishi. Though his earthly body has been reduced to the dust from which it was made, still the way in which he has influenced society, politics and culture of Bengal during his long life by his multifarious activities and versatile genius will never be forgotten in course of another one or two centuries. Time has not yet come for making a proper assessment of his contributions to music, painting, arts, literature, political and religious discourses. His versatile genius has been discussed from various angles of vision by eminent scholars and literatures ; but sufficient attention has not yet been paid to what he has done for the advancement of education and to his educational treatises that he has left behind. Perhaps, very few people know what an ideal teacher he was. He did not keep his educational thoughts and ideas confined to the pages of books but has given them a definite shape. He had the least confidence in the system of education, prevalent in this country. He saved himself and kept his

soul uncontaminated by running away, in his childhood, from such an institution which was nothing but a prisoner's cell to his free soul. Since then the thought of the reform of education which was sown in the form of seed in his mind in childhood, was later on, in his matured age, transformed into the mighty tree of the Biswabharati. He has very vividly described the impression that was made on his mind about the educational institutions of the country of the time in one of his lectures, viz. "Ideals of an Indian University" delivered in English at the Rotary Club, Ceylon.

"In my childhood I had been forced to go to such an institution. I have described, elsewhere, the result it produced, and the impression that it left on my mind. The condition of my mind was like a live plant that not being allowed to grow in its vital feeling of delight and in easy manner is kept cabined, cribbed and confined in a packing box with its branches clipped and sized and its natural growth stopped. Mind was kept deprived of freedom which is its natural food for the development of natural power, intelligence and maturity, and in its lieu an unnatural thirst and hunger for success in examination was created. The standard of success is to secure maximum marks in

examination with minimum knowledge—the result is a wrong committed consciously and playing a mean trick on knowledge.”

Being disgusted with the prevalent system of education, Rabindranath founded an ideal institution at Santiniketan in December, 1901 with only ten students. His first and foremost aim in founding the institution was to train children in the lap of open nature by giving them full freedom and without creating an artificial barrier between school and society. The ideal of Ashrama of the Munis and Rishis of ancient India inspired him from his very childhood. Since then all the articles that he has written on education, either in English or in Bengali have preached this noble ideal.

“Whenever education is separated from the course of life and made into an artificial thing, much of it becomes ineffective. At this, for a long time from the beginning of life, every day mind becomes afflicted and loses much of its natural potency; but we fail to understand the loss, simply because we cannot see the loss in a concrete form.

“The chief aim of the institution of Santiniketan is that students may take education as a part and parcel of their life.

“If we can truly achieve this aim, then to the boys and girls, to the teachers and the members of their family this institution will, at once, be transformed into a hermitage and shall not remain as a school.”

His long experience as a teacher made the poet realise that the education of children cannot be fruitful, if the connecting link that children feel between themselves and the universal nature is severed and arrangement for their training is made in an artificial environment.

“First of all” the poet says, “it is necessary to establish a connecting link between universal nature and the children of this place. This connecting link is cut off and distorted amidst artificial life of society.”

So instead of establishing his ideal institution in the busy and noisy capital, he has founded it at a shady sequestered place, far from the maddening crowd and ignoble strife. There trees and plants, worms and insects, birds and beasts will carry the message of education. Nature herself will unfold her big book, page after page, before the eyes of the students, and the six seasons will imperceptively help to foster this education. Book-learning will not be the be all and end all of the students here. The poet has the least faith in bookishness; so he laments:—

“In our system of education we lay stress only on book learning. Who cares for the various kinds of knowledge that lies vainly waiting before our eyes and ears to attract our attention? This shows not only our countrywide poverty of heart but also causes a positive harm to the love of our country. It is highly necessary to encourage and make arrangement for fostering the observative power of boys who may look into the number and variety of trees and plants, nature and shape of their roots and branches, and may also notice when they first put forth their flowers and bear fruits, when their leaves fall and new leaves sprout forth. The same may be said of birds and animals, worms and insects.

“It is not at all difficult to make boys acquainted with every thing that is found in this visible nature within this brief compass. It is difficult only to get a smart teacher who has eyes to see and ears to hear and who can really help students in making this acquaintance.”

Teacher Rabindranath does not merely rest with bringing a close contact between children and nature; the relationship of children with the people and society also did not escape his eagle eyes. So he formed the organisation of Boy Scouts with the help of Mr. Pearson. After learning the duties of scouts, they devote themselves to the uplift of the village of Bhubandanga and hamlets of the Santals. Their duty is to fill up

creeks and depressions, if there be any in the Ashrama.

To learn formalities, manners and customs is also a duty of the students. Regarding this, he has formulated certain laws to be observed by the students of Santiniketan e.g. students will salute one another, whenever a guest will set his foot in the Ashrama, students should look after his care and comfort, they should not enter with dirty clothes on in a class, a meeting, a prayer hall or a dining room, and should always bear in mind that if they fail to attend a meeting in time that shows disrespect to those who have come in time.

In one of his discourses on education he says:—

“It shall be the special duty of a teacher to keep vigilant eyes on students about their observance of courtesy.”

Now-a-days all educationists are of one opinion that some sort of vocational education should be given along with the general education and our Calcutta University has also adopted some measures to enforce this; but long long before this agitation was set on foot in our country, educator Rabindranath from his own experience could know that if arrangement for only cultural education is made in a poor country like ours, it will remain as an article of luxury of the rich alone—the general mass will not be benefited in the least by it. To do away with the barrenness of education and to make it an object of love and adoration of all, the rhythm of life should be kept unbroken by bringing a connecting link between the physical and the mental faculties of man.

“The flow of mental education does not get its impetus, if physical education does not go along with it. In a class many educationally backward or retarded boys are seen, it is so because their physical claim does not get any importance along with their mental education. For this negligence, their mind cannot grow rich.

“By physical education I do not mean only the physical exercise or games and sports. By physical education, I mean also those works which can be done by limbs; by that culture the body becomes well-trained and inertness is removed. Through these works a connecting link is established between the body and the mind and through that connection both become developed.

“In my opinion, each and every student of this Ashrama should be, as far as possible, specialised in some handicraft or other. The chief aim is not simply to master any handicraft only, but the real fact is this that through such physical culture mind too, becomes fresh and strong.*

“The dormant mind of the boys whom we think to be idiots are lying in wait to be awakened by the golden touch of physical smartness. The non-education of the body takes away the strength of the mental education. Besides, the man whose body has not been properly trained, however cultured he may be, has to live the life of a parasite in this world, and so he is an incomplete man. From this incompleteness, our students must be saved. In this respect, we may get opposition from some unreasonable guardians; but it should be our duty too, to overcome this opposition.”

Rabindranath again tells us another new thing about education. In his opinion, the imparting of education in the open nature is far better than imparting it in a stuffy room, no doubt; still better education can be given, if it is imparted while touring. The education which a man, full of life-force, can easily gather from the pages of Nature, through itinerant education, can never be learnt from the static system of education. So for a long time, he cherished the idea of

*The educationists of Europe and America have also made arrangement for the vocational training of the students of this age; but their aim is not to give such type of vocational education as would help them to earn their livelihood, later on; they have been introduced just to bring a coordination of hands and eyes.

founding a 'Touring School'. Of course, the poet has said nothing in detail about this touring school, but what little he has said, we must know it all.

"The best method of education is to teach boys while touring. The reason is not merely this that while touring, we may master various objects by our power of observation; but the reason is this that coming always in contact with the new, our watchful mental faculties are kept ever eager by the united marching of this in and out. Under such circumstances, it is easier for boys to master whatever they get to learn. Such itinerant education is quite effective for a man full of life force. Stationary education within the closed doors of the class room causes the pain of separation between his body and mind."

To be an ideal teacher, one must not only be a man of character, but also must be a savant, in the true sense of the term. He should have a strong curiosity to learn and a powerful urge to know. He should help student in the formation of their character, in the development of their personality and should bring fruition and realisation of their culture.

"If the teacher himself is not a scholar, how can he teach others? One lamp lights another—one lamp cannot light another, if it itself does not burn, does not give light. The teacher who recapitulates only what is written in the book, can teach nothing; for he cannot give inspiration. And when there is no inspiration, thoughts and ideas lose their constructive powers, and Students' time is wasted in school; for, what is taught to them, is nothing but some lifeless facts and figures.* A teacher should always remember that the principal aim of education is to create an uninterrupted path of culture for arousing the question of what is true in one's mind, and not to encourage the

pseudo learning that is infused in one's mind—throbbing, pulsating and vibrating with life-force. An educational institution should always have a frank and openhearted manner like doors, kept ajar where students and teachers may mix with one another without any restriction, as one does in one's own house.It should aim at fostering and developing that knowledge by which one's own personality is developed."

Of late, many educational methods have become current; the chief aim of the most of which is to make a child a scholar overnight; teacher Rabindranath has no faith in such modern educational methods. He has very explicitly said, "I do not attach any importance as to how memorising history has become easier or how working out sums has become a pleasant job in accordance with the new method; for, I know when we seek the method, we want the incredibly, cheap means. When it is difficult to get the proper man regularly, we try to remove that difficulty by some method. Man has attempted this method, time and again, but has failed again and again. Whatever we do, ultimately we come to realise that supreme truth, that education is imparted by teachers and not by any method. But his educational ideals cannot be realised in the existing educational institutions; so in 1916 on his return to India after his tour in Japan and America, Rabindranath could feel the necessity of establishing an institution for culture and education of mankind. In a meeting of the students, guardians and well-wishers of Santiniketan held on the 22nd. December, 1918, in a mango grove, he coined the word "Biswabharati". The opening ceremony of the Biswabharati was held in December, 1921 and her ideal is—"Jatra biswa bhabatyakan nidam"—where the whole world will be compressed in a nutshell as one family. Here relationship between students and teachers is not merely of imparting education—a true relationship has been established here and the wall that kept the field of education confined, has been raised to the ground.

*Cf. Sayings of the ancient Greeks: "The State exists for the betterment of its members and the increase of virtue; Virtue depends on right knowledge and the only true title to office is knowledge."

If the teacher instead of being a man remains merely a teacher, then he will only give his lesson like a machine, he will not be able to infuse life in teaching. The teacher shall have to occupy the position of parents, he shall have to be full to the brim with love, affection, forgiveness and sacrifice; then and then only he will be able to give a right direction to his students and liberate their minds from all sorts of obstacles. This is Rabindranath's opinion. The truth that Rabindranath has been able to realise as the result of his long experience as a teacher, has been expressed in his inimitable language.

"Teaching, like the flow of blood in a living organism, can communicate through, the full relationship between students and teachers. For, the bringing up of children and their education are the bounden duty of parents; but as parents often do not get that opportunity or competency, the help of other competent men becomes essentially necessary.* Under such circumstances, a teacher cannot but be loco parentis. We can neither purchase by gold nor can partially adopt the summum bonum of life; we can appropriate that through love, affection and devotion; it is digestive secretion of human stomach, it alone can assimilate a thing with life. At the present age, such a Guru has become essentially necessary. In childhood nothing is deadlier than soulless teaching—it presses out much more than it gives to the mind. In our social order we are on the lookout of that Guru who can give a dynamic force to our life; in our system of education we are in search of that Guru who can liberate our mind."

*The arrangement of education of Emile by J. J. Rousseau may be compared here.

Rabindranath has further said; the aim of education should be to unfold the diversity of life and to bring out the harmony of life at the same time. He wants such education as will make men not only replete with knowledge but will also unite men with the bond of love and friendship. He wants that knowledge by the acquisition of which mankind is never swerved from the higher ideal of humanity and which helps to the unfolding of the full beauty of spiritual life. That devotee to beauty, on seeing in his mind's eye, at the close of his life, the horrible sight and dreadful develry that have spread havoc in different quarters, making a grim face at culture and civilisation of mankind was greatly shocked and long before, in 1341 B.S. he preached from his seat at Santiniketan.

"We shall have to study the mind and the character of men; for, the fundamental principle of education is not merely to make ourselves rich in culture but to establish the bond of love and friendship with men, and for this it is greatly necessary to understand men and to know their character minutely. We shall have to understand the personal peculiarities of others—that peculiarity is the genuine language of the heart of men. We shall have to keep a special eye on the creative nature, so that we may not be deprived of that touch of humanity, that sympathy, that emotion which is going on since the creation of this universe and which is the eternal wealth of humanity."

Teacher Rabindranath has come to this truth as a result of his lifelong experience in education. This is the summum bonum, the highest truth about education.

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KALA-MEGHA; THE LION AMONG TAMIL POETS

BY K. VISWANATHAN, *Bansda*

BORN in Tirukkudanthai, a smarta brahmin was serving in the kitchen of the Sriranga temple, which was a vishnava one. Attached to the temple at Jambukeswara not far, a saiva one, was serving a temple maid named Mohanangi whose charm ensnared the brahmin. Joining her he used to send her sweets etc. from the temple kitchen. While singing before the idol she bent her head by which the other maids knew that she was joining a man from the Vishnu temple, and mocked her. She was struck by this as by an arrow. So next day when the brahmin came to her house she bolted the door from inside and refused to open it to admit him. The brahmin said, "If you do not open, I will die here." Then she said, "I am a saivite; you are a vaishnavite; I can't join you; I shall do if you become a saivite." To which he said, "I shall do as you want", because he was overcome by passion, and leaving Sriranga temple, joined the Siva temple and gave her sweets and money out of his earnings there.

There was in Jambukeswara a saivite brahmin who prayed to the goddess "I should become a full-fledged *pandit*." For this he worshipped the goddess with all due formalities, and with full fervour and devotion. One midnight the goddess, the supreme Ruler of all the worlds, assumed the form of a beautiful girl, put on white clothes, with her mouth full of betel, appeared before the brahmin and said, "Open thy mouth"; she was about to spit into his mouth. He was not lucky. He said, "Who art thou, impudent girl, come to spit in my mouth? get thee gone." He could not realise her as the Supreme. She left him.

That night the temple cook had seen Mohanangi come to the temple for certain performance and said to her, "When you return, call on me; we shall go together."

He slept on a pial there. She searched for him at the end of the performance and not finding him went home alone. The devotees and others left the temple and the temple doors were closed. The cook woke up, and not finding Mohanangi and unable to get out, was musing. Just then the goddess, in the same form, appeared before and asked him to open his mouth. He opened it and she spat into his mouth the contents of her mouth and said, "Now swallow it." He thought that it was Mohanangi and if he did not do so, she would get angry. He had also some merits accumulated in his previous births. So he swallowed it as ordered. She said, "you shall be great poet in tamil; you will win all poets; you will lack nothing in poesy. You shall shower poems like the rain clouds," and disappeared. He became so and hence came to be known as Kalamegha".

The moment the goddess disappeared, he got words in his mouth to compose poems and give new ideas and interpretations to whatever he saw from a stone to the god and composed on the spot a poem in praise of the goddess. He moved from place to place and was called "Kalamegha the poet."

He visited the holy places such as Tiruchengode, Conjeevaram, Chidambaram, Tirukkalikundram, Srimushtha, Tiruvalangad, Mayura, Truvalur, Tiruvannamalai, Madura, etc. and composed poems praising gods and goddesses there and gave new thoughts on each. At Vythiswaran temple he composed a poem having the following idea: "O Siva, thou formerly burnist the god of Love; that fire is in Thy eye. The fire that the rishis put in Daruka to kill Thee is in thy hand. The fire that destroyed *Tripura* is in Thy smile. Thou art known as the Destroyer. As such there is fire in all Thy limbs. How is the goddess joining

Thee not burnt? Does She know any magic by which fire is changed or cooled? She remains with Thee as a result of that knowledge? Tell me that clearly."

Once there was a fight between the followers in Jambukeswara and Sriranga. To pacify them Kalamegha said in a poem, "Each says 'my religion is best,' 'my god is best,' 'your god is low,' 'your religion is low'; they quarrel in words uselessly. There is only one god...call them by whatever names you like....."

As thus he was coming on a pilgrimage he came to the town of Tirumalaraya, the raja, who had as his court poet "Ati-madura kavi" which translated means "very sweet poet". This poet was very haughty, and insulted and humiliated all, thinking that none was equal to him. Hearing of his atrocities, Kalamegha decided to put him down. Mohanangi said to him, "In the port of Tirumalaraya are found pearls unmatched by pearls of any other place. Please bring some for me." He promised her.

Coming to the town, he reached the bazar street. With great pomp on an elephant the poet was coming opposite. Kalamegha did not move but stood in the middle. One of the servants, as usual, said to Kalamegha, "Say, 'Atimadura kaviraya singam parak'" (which means "the great lion of poets, Atimadura"). Kalamegha composed a poem there which was a parody and a satire on him. The poet thought "Who is this arrogant fool?" As soon as he reached the king's place, he sent a servant and asked him to get full particulars of the brahmin in the street. When the servant asked Kalamegha, he said, "I shall give you all in writing, as you may not remember", and wrote a poem in which he derided the poet and narrated how others are humiliated.

Reading this, the poet and others thought that he should be insulted; otherwise he would not come to his senses and his pride not humbled. So they contrived to ask the king to get Kalamegha bound before him. The servant sent to fetch Kalamegha wanted

to bind him when Kalamegha said, "I shall come myself"; buying a lime fruit from a shope, he came with the servants. The poet had instructed the others to sit close, not to rise when Kalamegha came and not allow him to approach the King. They did so. Guessing some design, Kalamegha, from a distance, blessed the king and offered the lime fruit. When brahmins bless and offer anything, all must accept it and none can refuse. So the King stretched his hand to receive it. The courtiers had to give way to Kalamegha so that he could give it to the King. Kalamegha went near the King and offered it, the King accepted it but did not offer him a seat.

Kalamegha turned towards the direction of Jambukeswara, meditated on the Goddess there, and composed a poem "Saraswati mala" in thirty stanzas. As he finished it, the throne on which was the King grew or extended on one side and Kalamegha sat thereon. All were surprised and thought that it was some magic. Kalamegha said, "Why are all staring at me? Who are you?" On their saying they were poets, he composed a poem ridiculing them. The poet said, "I am the court poet here for many years; who are you?" Kalamegha said, "I am Kalamegha." Words flew between the two in succession.

Ultimately the poet said, "Sing *ari-gandam*." Kalamegha said, "What is it?" The poet said, "you must have a knife fixed in your neck, and sing as signs are made opposite you. If you fail or go wrong anywhere, you will be killed by that knife being thrust into your neck." Kalamegha said, "Is it all? It is so easy! I can sing *Yamaganda*." The poet spoke, "Is there anything as *yamaganda*? What is it?" Kalamegha explained; "A pit should be dug in the earth, 16 feet in length, breadth and depth. In the four corners iron pillars 16 feet high should be fixed. On each of these pillars an iron frame should be set up and there should be a frame in the middle of the pit; on this a structure should be erected. In the pit should be closely ar-

ranged fire-wood that give slow and steady fire of intense heat. They should be set on fire. Over this and below the structure an iron case or cylinder of a man's size is fixed which should be filled with lac, wax, oil, sulphur, resin etc.; when these are melted and boiling, emitting great heat, four strong elephants should be kept tied to the pillars by expert mahouts, behind these should be rings attached to chains. The poet should ascend the structure above the fire and iron case, with four knives fixed to his neck and four to his waist, all the knives being thoroughly ground and sharpened just before. To the ends of these knives chains are attached and fixed in the elephant's trunk. Persons give signs and he composes poems. If there be a slight mistake anywhere, persons sign to the mahouts who hit the elephants: the elephants in turn pull the chains. The person's body is cut by the knives, his head one piece, his trunk another and the pieces fall into the iron case. Death is certain. This is Yamaganda."

Hearing this, all thought that it was really Yamaganda (tortures of hell) as the name indicated. They were afraid that he would get them into trouble; so they decided that he should be got into it by a trick. They thought, "This man has insulted all. He should therefore be made to undergo this." The poet then said, "It is not necessary for us to do this. You insulted us and when we said of *arigandam*, you spoke of *yamaganda*. So you should exemplify what you said."

Kalamegha, knowing their mind and wishing to prove his worth, said, "I shall show you my greatness; you can never do

it." As soon as he said, they thought that delay would be dangerous, and so got everything prepared as he said. Kalamegha ascended the structure and said, "Give me your signs without waste of time" They said, "This fellow's courage is indescribable," and began to ask him many things with signs, all of which he answered without the least trouble, because he was a God-inspired poet. In this way he composed poems and explained many words; new ideas and thought were expounded; he gave many more things which need not and cannot be explained here. Even then he was not honored. So he decided to leave the place with the intention never more to step there again and forgetting even that he had to get pearls for Mohanangi, left the place on a pilgrimage.

Once a child afraid of Kalamegha went to its mother who abused Kalamegha; the child composed a poem, the child died; her husband begged him; Kalamegha composed another poem and the child came to life.

During his pilgrimage again he composed many poems at different places and helped others to compose and get prizes. In Tiruvalur one learned person wished to sing the praise of God, composed one line, but could not proceed further. So he wrote that line on the temple wall. Next day he was surprised to see it complete with the last three lines. He inquired and found it was Kalamegha who completed the stanza. He admired and respected Kalamegha the greater. Many years later when Kalamegha was dead and his dead body was burning in the cremation ground, he came there and composed a poem (ode or dirge), mourning the death of such an eminent poet and the loss to the world thereby.

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SOME ASPECTS OF TEACHING ENGLISH

By SRI S. SUBRAMANIA AIYAR, B.A., L.T., Retired Headmaster, Thyagarayanagar

I. PRONUNCIATION

THE following words are generally heard mispronounced:— pears (parz) sew (so), buffet in trains (boofa), business (biznis) busy (bizi), bury (beri), cause (koz) neighbour (naber) exercise (eksersize), wise (wiz) philosophy (filosopi) machine (meshen) machinery (mesheneri). The last two words are confused respectively with *mission* and *missionary*. The word *ay* (i=yes) should not be confused with *aye* (a=ever) *Educate* must be pronounced edyukat and not *ejukat* and *sovereign* as *sovrin*. The accent in *Majesty* falls on the first syllable and not on the second as most pupils pronounce it. The correct pronunciation is given within brackets of each word. The above words are frequently met with by the pupils in their daily lessons, and the correct pronunciation may be taught then and there. Oral composition classes give the teacher ample scope for teaching pronunciation. For instance, the words ending in *ary*, *ory*, *ry* may be grouped together and the incidence of the accent determined roughly roughly because, no one rule in pronunciation is of universal application. And likewise the words ending in *tive*, *ive* and *ve* may be dealt with.

The pupils must be told that they must refer to a good pronouncing dictionary such as the Concise Oxford Dictionary for the correct pronunciation of a word that presents a difficulty. And it should be impressed that pronunciation is as important an aspect of English as any other. Note the incidence of the accent in the following words in their several forms:—e'xecute (e'ks) exe'cutive, execution (iksekushn).

II. GRAMMAR

Formerly grammar was very rigid and would not tolerate any violation of its rules. With the growing contact, however, of the

English with other peoples up the world, new words and phrases crept in and made the language rather corrupt in spite of the protests of purists and others interested in the safeguarding of its purity. Consequently grammar which once held sway over usage became its handmaid. Certain colloquialisms pass master in standard English in spite of grammar, and the following are a few examples—who do you mean? it's me, the proposition was turned down. 'I want it badly and the like. It may thus be inferred that grammar sometimes plays second fiddle to usage.

III. HOW TO TEACH PUPILS THE USE OF THE ARTICLES

The pupil may be told that there are two kinds of articles in English—definite and indefinite. The teacher may then proceed to write down a few examples of sentences containing the articles, and require the pupils to puzzle out the reasons. The Inductive method of teaching generally holds good in grammar, and may safely be relied on. The teacher may then give examples of the uses of the articles, such as *a* history, *an* hour *a* useful *a* or *an* historical event, and make the pupils to find out the answers. He will do well to help the pupils with suitable hints. He will tell them the *h* in *historical* and *hotel* having come to be sounded *a* may now correctly be used instead of *an*, though the words are accented on the second syllable. The teacher will then proceed to explain certain peculiar uses of the indefinite articles as in 'birds of *a* feather, *a* Mr. Smith, *a* Solomon and the like. The definite article too may be dealt with on similar lines. The phrase, the 'philosopher and statesman' must be distinguished from 'the philosopher and the statesman.' The pupils must understand why they should not say. 'The honesty is best policy,' 'the man went

to the bed,' 'the news took the air,' 'John became the king' and 'what sort of a man is he?' The teacher will do well to employ positive and negative methods in explaining the uses of the articles.

IV. COMPOSITION—LETTER-WRITING

In addressing envelopes of letters, pupils must guard against the common error of jumbling up courtesy titles and professional titles: Mr. Runganatham Avergal; Mr. Ruganathan, Esq., Sir Ramaswami, Rev. Maclean, The Hon'ble Mr. W. Miller, Sir C. P. Ramaswami and the Rev. G. H. Maclean are the correct forms. The Hon'ble William Miller or the Hon'ble W. Miller is correct, but 'the Hon'ble Mr. William Miller' is not. It is not known on what authority Messrs Wren and Martin in their book on High school grammar and Composition condemn the use of the initials and insist on the use of *Mr.* before them. They hold that the Hon'ble Mr. William Miller is the correct form. Pupils generally have a tendency to end their letters with yours sincerely, except in the case of letters written to their superiors.

The different forms of subscription, therefore, require to be explained to the pupils. They must be told that the forms to be adopted depend on difference of rank or the degree of friendship existing between the writer and the addressee.

V. SOME MISUSED IDIOMS

The expression 'two hundred rupees and odd' is incorrect. It is one of the grammatical blunders committed even by many educated Indians. The word *odd* means 'with something of a lower denomination extra.' Two hundred and odd = 200 and some tens extra; *odd* is an adjective. The reason why the sentence 'such practices exist both in Bombay and Madras' is faulty needs to be explained to the pupils. They must be told that the words coming after 'and' should be similar to those before it; both in Bombay and in Madras and not Madras merely. The teacher

will note that the blackboard will help him a great deal to fix the facts on the pupils' memory. Pupil must be able to distinguish between 'to take the air' and 'to take air or wind.' The teacher may write on the blackboard sentences such as follows: Shall we go out to *take the air*? The news somehow *took air* or wind. He should impress on the pupils' minds that the definite article *the* should not be omitted in the former sentence, and that it should not be expressed in the latter. The sentence 'Academic qualifications were not allowed to *take precedence* over communal considerations' is wrong. *To take precedence of* is the correct idiom. The pupil may be taught this in the course of a grammar lesson on the use of appropriate prepositions. In an oral composition class, the teacher may explain the uses of *agree* with different prepositions in different contexts. It should also be noted that examples illustrating the uses should be given in complete sentences rather than in clauses or phrases. The following may serve as examples:—

1. I agree with him. 2. I agree to your proposal. 3. We did not agree on this subject. 4. The business methods were quite contrary to the policy *agreed upon*. A hunter must beware of the trap he lays out to catch an animal, lest he should be caught himself.

VI. BLUNDERS IN QUESTIONING

In question paper I on General knowledge set for candidates for the Madras Ministerial service in 1936, the following questions appear:—"In what part of India are the following commodities found?—gold, coal, cotton, tea, wheat.

The first question in part 2 at the same paper runs as follows:—

'What are the two most important high grade timbers produced in South India? Compare their qualities (1) with mango wood and (2) deal wood.

A higher form in a high school may be set the task of detecting the blunders. The

teacher may give a few hints by way of guiding them. For instance he may tell them that they have to use their knowledge of grammar and commonsense in finding out the blunders. High and grade in *high grade timbers* like a first-class ticket should be hyphenated. The qualities of one kind of wood cannot be compared with another kind

of wood; the qualities of the former may be compared with *those* of the latter. The things given in question 1 cannot be found together even in a land overflowing with milk and honey. Each of the commodities should therefore replace 'the commodities.'

PROF. S. KUPPUSWAMY SASTRIAR

BY RAO SABIB S. R. RANGANATHAN, M.A., L.T., F. L. A., Librarian, University Library, Madras, and Secretary, Madras Library Association

"FAMILIARITY breeds enchantment; distance lends contempt" is the modified version demanded by the personality of Prof. S. Kuppuswamy Sastriar. Shy and stony before strangers, but most open-hearted and loquacious with friends; fearfully orthodox and rigidly formal in the eyes of the unfamiliar, but most catholic and as natural as a child in intimate circles; believed by many to be a severe, ponderous, phlegmatic, repository of old learning, but known by close associates as a charming, versatile, nimble, ever-growing, scholar—this was Prof. Kuppuswamy Sastriar. Affection of the deepest kind, tolerance of the widest range, and, above all, sincerity of the highest order were embodied in him.

FIRST CONTACT

1916. A Sunday evening in August, Mr. P. S. Subramania Sastri, an old pupil of the Professor and a class-mate of mine, introduced me to him at his residence at Nadu Street, Mylapore, Madras as the Secretary of the Mathematics Association of the Teachers' College. Though somewhat chilled by the halo of aristocratic *touche-me-not-ness* which I imagined to surround him, I made bold to invite him to preside over a meeting of the Association at which I was to read a paper on *Euclid in Sanskrit*. A firm refusal on the brief ground that he was not a stu-

dent of mathematics was the result. "The medium is Sanskrit" was offered as a special pleading; but there was no effect. This points to a trait in his character hidden to many by the unusually vast range of his knowledge which misled them to a hasty prejudice that he would offer to dabble in any subject while, in fact, he would never enter a field unless he had gained a mastery over it.

SECOND CONTACT

1921. About 1-45 p.m. on a week-day in July, some of us, assistant professors were sitting in the common room of the Presidency College. A tall figure with large eyes, a long long-coat and a white lace-bordered scarf dashed through the room. The beaming intellectual face arrested attention. There was a dart back again, after a few minutes, without exchange of a word, a smile or even a glance with any one sitting in the room. The movement recalled to mind the lightning dash of Sri Nataraja from the hall of a thousand pillars to the *Chitsabha* at Chidambaram on the biennial *Darsan* day. My colleagues in the common room were all bushed to silence during the few minutes. The older ones told me later that he was the Professor of Sanskrit. We then attributed his aloofness to his

'superiority complex'; but some of us knew later that it was entirely due to shyness.

THIRD CONTACT

1925. The University Library had become my sole object of interest. It was 4-30 p.m. August 25, all the members of the Library Committee but one had arrived. "Let us begin our tea", some one said, "he won't come". Another added, "He will come only for the meeting." Prof. Sastri did come punctually at 5 p.m. for the meeting. When all else had gone, he alone stayed behind. I had not known him well; with some embarrassment, I began, "To make it possible for you to join us at tea, I had everything cooked and prepared at home". But his words were free and in homely Tamil: "I had done you a wrong. I had expected to find in you a de-Indianised, 'swanky' fellow aping the British in food, dress and all externals, and striving to thrive on shallowness. That is why I avoided your tea; it is not orthodoxy as people may imagine. Now that I have seen, I realise how wrong I had been. I shall dine with you some day next week; your having crossed the seas is no bar".

DAILY CONTACT

From that day onwards, till he went over to the Annamalai University in 1936, we met almost every day for about three hours. During the first hour, I used to witness how gladly he allowed his "brains to be picked" by all sorts of people. The next two hours, I used to have him all to myself—often on the sands of the beach which we would leave only at about 10 p.m. Seldom did our talk leave the level of literary, philosophical, sociological and bibliographical discussion. Occasionally there would be enquiries about the members of each other's family; now and again the Professor would light up the discussion with reminiscential anecdotes about his own *Acharya* or some of the leading intellectual lights of his younger days; but I had never experienced either

light talk or gossip or even a trace of scandal-mongering.

A LIVING BIBLIOGRAPHY

He took an active and proud interest in the forging of the Colon Classification. The informal opportunity which our evening meetings gave me to learn something of his profound knowledge of the science of interpretation contributed not a little to the framing of the Rules of Classification and the rules of the *Classified Catalogue Code*. The Indological schedules were all virtually due to him. It was while building them that I was able to sense and admire the extensiveness, the depth and the exhaustiveness of his knowledge of printed books as well as unpublished manuscripts. The certitude of his knowledge of the filiation relation between the various classics and the hierarchies of their commentaries, sub-commentaries, sub-sub-commentaries and so on was amazing, whatever be the subject, be it *Ayurveda* or *Alamkara* or linguistics, or Vedic or post Vedic religion or any of the schools of Indian Philosophy—Hindu, Jain or Buddhist—or Ancient Indian Polity or Hindu law. He was equally well-read on the modern side and kept himself ever abreast of the latest developments in thought. He was verily a bibliography in flesh and blood.

AN USUAL SOCIAL VIRTUE

Real friendship finds it difficult to flourish either between individuals or between communities and nations, when both parties seek to live on the principle "Tails, I win; heads, you lose." But wherever Prof. Sastri was, the party on one side, his selfless affection and faultless sincerity made up for the defects on the other side and lasting friendship persisted. He would often quote his own amendment of the Shavian definition of a gentleman: "A gentleman is one who gives more to society than he takes from it." He drew the blind, as it were, against all the faults—in thought, word and deed—of those who had come into his inti-

mate circle and magnified their virtues, however slight they might be. Some unscrupulous people did exploit this "weakness" in him; he knew it and still allowed it to go on and work itself out. He used to say often "In Cosmic Economy, even evil is there only to help the manifestation and the nourishment of good. Will you do away with mud if you remember that the lotus is one of its exquisite gifts."

THE LAST CONTACT

When I had the privilege of spending a few hours by his bed-side some days before his death, his body indicated unmistakably that his end was near. But the agility and the characteristic subtlety of his intellect and the brightness of his eyes made me fondly hope that he would recover. He narrated how his life-long literary pursuit had become incompatible with life in the village, how the conflict threatened to develop a double-personality in him, how he managed to avoid it by throwing himself heart and soul in intensive farming, how he read all the available literature on the subject and managed to put it to practice with some measure of success. The warmth of his affection to friends and students had gained in intensity; some of the sentiments he expressed to me personally are too intimate to be published.

NOTICE OF DEPARTURE

I cannot, however, resist the desire to record here another intimate touch—which belongs to the sphere of epi-phenomena. I am not unaware of scoffers who indulge in setting all trans-rational experiences to ridicule by attributing them to hallucination or even insanity. It may be due to their scientific training and attitude being too meagre and warped to realise that it would be as irrational to deny them all *ex-cathedra* as it would be to believe everything without safeguard against possible fraud. The Professor himself, I know, had an open mind on the subject and he believed in the possibility, of disembodied souls communi-

cating with embodied ones. At about 11-45 a.m. on Sunday, September, 5, 1943, a ring of the telephone, which got disconnected before I could respond, threw me suddenly into an unusual state of worry and confusion. Within an hour a messenger who was sent home reported that everything was alright there. Then the idea flashed through my mind that the Professor was probably departing. A few minutes later Mr. Seshagiri's letter came to hand. Though it was full of hope in the body, it ended with the post-script "Father is sinking." This made me feel that I was perhaps right in thinking that the disturbance in me was the result of an attempt on the part of the Professor to inform me of his departure. At about 10 a.m. on the next day Dr. T. R. Chintamani's letter of the 5th September arrived with the single sentence: "The Professor passed away at about 12 noon today."

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THE POLITICS OF POWER

By SRI N. R. BHUVARAHAN, M.A., "Indian Express," Madras

(Continued from page 375.)

FASCISM has no political Philosophy of its own. It began as a reactionary movement in Italy against socialism. It is curious to note that its founder Mussolini was an ex-socialist. It believes in war as an instrument of national policy. It exalts brute force. It is anti-rational, anti-democratic and anti-intellectual. The individual is a cog in the machinery of the state and he sacrifices his material comforts to glorify the state and its achievements. The strength of Fascism lies in its efficient war machine to which all the resources of the state are geared. Playing fields are converted into barracks, bayonets replace olive branches, women become tools for the production of children and youths find immense consolation in uniforms, torch-light processions, parades, salutes and goose-steppings. The martial spirit of the nation is kept up by an aggressive foreign policy. The armament firms grind ceaselessly, while their owners reap enormous profits. The young men and woman living in a tense atmosphere are deluded by the elevation of the philosophy of the jungle into a law of life. This is also true of Nazism its German counterpart. The Nazi Philosophy can be summed up in the slogans "Gun is more important than butter," "More battleships than scholarships." The ownership of the means of production are in private hands with profit-making as its chief motive. In short, Fascism from one point of view is organised superstition.

Fascism manages its economic life by various corporation. They have mostly remained on paper. The standard of life of the masses remains incredibly low. Strikes are forbidden. Industrial disputes are settled in state courts which function in the interests of capitalists. Fascism destroys all workers' organisations and trade unions. In the final analysis it is the institutional

technique of monopoly capitalism in a state of contraction. It is prepared to fight the working class rather than easily surrender its privileges. It uses power ruthlessly to preserve its citadel from attack. The army, the landlords, the capitalists, the church, the vested interests and law are at its back. It believes in aggressive expansion abroad for colonies, raw materials, sources of power and spheres of influence. It exalts the primitive instructs in man and lays stress on racial purity. It advocates to an unhealthy extent Jew baiting. Power is used to push these ends in the Fascist states by its holders. Power is sweet and few men surrender it voluntarily. It is especially sweet to those who have the habit of it and the habit becomes most ingrained in those who have governed by bayonets instead of ballot boxes.

Communism promises many glorious things. It signifies the end of the injustice of the rich and poor, an end of economic slavery, an end of war. It promises to end commercialism, the subtle falsehood that leads men to appraise everything by its money value. The money value is often determined by the caprices of idle plutocrats. It promises a world where all men and women shall be kept sane by work and where all work shall be of value is the community, not only to a few wealthy vampires. It is to sweep away listlessness, pessimism and weakness and the complicated miseries that arise from an economic oligarchy. In place of palaces and hovels, futile violence and useless misery, there is to be wholesome work, enough but not too much, all of it useful, performed by men and women who have no time for pessimism and no occasion for despair. These things are realised in an appreciable measure in Soviet Russia as Pat Sloan's recent book admirably reveals. Power exercised for social ends as in Russia

is sure to reap a rich harvest and we behold the first glimmer of a new civilization, the child of the revolution of 1917.

None can doubt that the whole capitalist system is based upon unadulterated violence tempered by spasmodic concession to the excluded many who constantly attach its foundations. Its injustice and inequity is so glaring that only appalling ignorance, inertia, tradition and systematic doping could lead the masses to tolerate it. In the long run the exercise of power for ends unequally shared always breeds envy, hate and faction in a society. No where is its truth more bluntly stated than in the sombre pages of Prof. Tawney's admirable chapter entitled. 'The richness of our acquisitive society.' No social fabric can survive the circulation of these evils in its tissues. Historically the human animal is so habituated to obedience that there is no case where popular violence has occurred in which its roots are not traceable to popular suffering. The answer to the revolutionist is not the hangman's rope but a society which convinces the common man of its justice. The answer to the nationalist patriot is not as in India imprisonment without trial but the opportunity fully to share in the disposition of his own life. The imprisonment of Tom Mooney and Billings, the trial of Sacco and Vanzetti in America, the arrest of Tom Mann in England, the case of the Meerat Prisoners and the detention of Gandhiji, Nehru and other eminent nationalist leaders in India, the trial of Dimitroff in connection with the Reichstag fire in Nazi Germany, the confinement of Pastor Neimoller and Karl Barth, the treason trials of Russia, the ghastly murder of Matteotti in Italy, the expulsion of Einstein, Ernst Toller, Thomas Mann, Sigmund Freud and Gaetano Salvemini, the treatment afforded to Von Ossietzky and Edgar Andre by the Nazi Government are shocking instances of the abuse of power by its holders.

That indeed is the invariable nature of power. The law of its being is to hate the process of rational examination. Its im-

pudence is the measure of our futility. Its self-expression is purchased by the suppression of ours. It assumes the coincidence of its private will with the public good. And it evokes everywhere imitation. In its adventurous and aggressive quest for colonies power beatifies imperialism and gives a noble picture of the Whiteman's burdens. It does not recognise the human needs of the natives who bear the heavy yoke of imperialist exploitation. It is not as Plato again and again insisted, to will what is right, it is also necessary to know what it is right is will. We are painfully aware that the Divine Right of Kings, the sovereignty of the people, the social contract, the conception of power as by its nature, a trust, are all of them answers to the questions of why and in what degree men must obey their rulers or how power should be used by its holders for social good.

Grim experience has taught men that powers is poisonous to its possessors. It is not only, as Lord Acton scathingly said, "Corrodes the conscience, hardens the heart, and confounds the understanding" of those who hold power; it deadens in any state the impulses which make for the greatness of a civilization. Loyalty should be won from us. It should not be imposed upon us. It must grow spontaneously out of our experience that is ever changing. It is common that when a man seeks wealth, he is apt to be laughed at if he says that he only wants it in order to use it philanthropically, but when a man seeks power, his lofty promises are accepted by vast numbers at their face value. Herein lies our peril. Power stands or falls by its results. Excessive use of power keeps men uninspired and uniform, inert and ignorant. It makes monarchs like Louis XIV declare foolishly 'I am the state' and 'After me the deluge.' It can as in pre-revolutionary Russia create a desert and call it peace. So used, power is the more disastrous because it merely postpones the day of reckoning. That is why Madison observed that "the accumulation of all powers...in the same hands...may justly

be pronounced the very definition of tyranny." Rebellion therefore from an abuse of power, is as T. H. Green insisted, a contingent duty on the part of the citizen. We act always at our peril; but the peril involved in obedience in the end be greater than the peril of rebellion.

The power impulse is embodied in our society in the excessive concentration of economic interests, industrialism and governmental technique. It is always permeated by selfishness, greed, envy, malice, hate and cruel delights in the suffering of others. Can it be replaced by a love impulse as Bertrand Russell earnestly proposes? I have my doubts. For, one cannot eschew the power impulse altogether from society or replace it by a love impulse which involves a tremendous mental revolution. We may try to indefinitely diminish if not totally abolish the power impulse in society by proper political techniques and a rational system of education. A Christ, a Buddha and a Confucius taught people to eschew the power impulse in society and to replace it by a love impulse. In our day the late Mr. Lansbury, Mahatma Gandhi, Aldous Huxley, Dr. Radhakrishnan and many pacifists share the same view. I think it would be an utterly futile doctrine in our secular world which is now passing through a new Dark Age. As Russell says: "Power in itself is not dangerous. What is dangerous is power wielded for the sake of power, not power wielded for the sake of genuine good. The leaders of the modern world are drunk with power—Power is not one of the ends of life, but merely a means to other ends; and until men remember the ends that power should subserve science will not do what it might to minister to the good life....In the

conscious desires of the man who seeks power for its own sake there is something dusty; when he has it he wants only more power, and does not find rest in contemplation of what he has. The seeker after power must be perpetually engaged in some fresh manipulation if he is not to suffer from a sense of emptiness."

Power, then is neutral. Habits of power intensify the passion of rivalry; therefore a state in which power is centralised will, other things being equal, be more bellicose than one in which power is diffused. Power is not bad in itself. Only the use of it for self-aggrandisement is bad and ought to be condemned. We can as well say that science which has done so much for our social needs is bad because the best brains in the fascist countries are harnessed to the laboratories to invent destructive material which can extinguish civilization in no time. Only in the purposes realised for social ends can we judge the nature of power. What rather we require is to limit the possession of power to the fit to exercise it for social good. These by their inherent work would act as the trustees of mankind. We must be eternally vigilant if we want to cherish the habits of civilised life. Pericles was aware of it and also Oliver Cromwell. Unfortunately, in our country the reward for vigilance is detention without trial. That was the secret of Royer Collard's great aphorism that liberty is the courage to resist. We can reach the summit if we but seek the courage to go forward. The price is very great. The process is difficult. Yet as Spinoza said, all things excellent are as difficult as they are rare.

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THE TWO EPICS—A CONTRAST

By SRI M. B. NARASIMHA IENGAR, M. Sc., Bangalore

THE Hindus regard with great respect that two epics Ramayana and Mahabharata. A portion of the first epic is read everyday by every orthodox Hindu. He who has a smattering knowledge of Sanskrit reads the Valmeeki version of it. A tamilian takes to the study of Kamba Ramayana. An hindi knowing gentleman takes great pleasure in reading Rama-charitra Manasa, the Hindu version of it written by Tulasidas. The tradition is that a systematic study of Ramayana would bring prosperity and long life. On the other hand the other epic, Mahabharata is rarely read by any one. The Gita portion of it one may look into. But the other portions are practically neglected and in houses we rarely find people studying even the Virata Parvam. What then is the reason of this differentiating treatment? An answer to this question could be got only by looking into the epics themselves.

Take for instance Ramayana. The first chapter begins in the form of a dialogue. There Valmeeki respectfully, submits the following questions:—

Lives there among men, one who is crowned with every excellent quality?

Who has mastered the science of weapons, human and divine, and out of the might engendered thereby, is able to scatter the foes before him?

Who is versed in the mysteries of Dharma as revealed in the vedas and the smrites?

Who is it that bears not in mind the grievous wrongs done by others, but magnifies any single act of kindness on their part?

Who is it whose thoughts, words, and deeds are in perfect harmony?

Who never stays from his dharma, even in the face of direst peril and desires?

Whose life is pure and spotless?

Who ever seeks the highest good of humanity and of himself here and after?

Whose eyes see clearly and unerringly between the real and the unreal?

Who has a profound knowledge of men and things and turns himself round the hearts of all?

Who is a perennial source of delight to all that approach him?

Who like a skilful driver, has his mind and senses under control?

Who is it that allows not the temper to get the upperhand of him?

Who is it, of presence so charming, that men can never have enough of beholding him?

Whose heart knows not envy, spite, and calumny?

Who is it that men and Gods dare not face, when the fiery joy of battle is on him?

It is hard to find one individual satisfying all the conditions enumerated above. Valmeeki himself admits it. But he places before us one character that is the model of truth and that is Sri Rama. Sri Rama, according to him, is the brightest expression of Dharma, whatever the meaning of that word be. He satisfies to a great degree all the qualities stated above. A correct estimate of his character has to be reserved for another occasion. But he is an ideal person, whose footsteps everyone has to follow. Sri Rama displays to the whole world how one has to behave towards his relations, his friends, his enemies and also towards the humanity in general. No other example is worth following by any one in the world. His character and conduct cannot be attacked in any direction what so ever.

The whole plot of the epic centres round the feminine character, Sita, the consort of Sri Rama. Remove her from the epic. The latter portion would not have assumed the present form, and it would be like playing Hamlet without the Prince of Denmark.

What then is the part played by Sita in the epic? We must make a study of the epic itself if we want that a proper answer is to be given to that question. The whole plot depends upon her separation with Sri Rama. She separates from Sri Rama on three occasions and on each occasion she has a set purpose. The first time is when she is abducted by Ravana at Panchavati. South of the Ganges the Rishis were living at hermitages. They were constantly harassed by Rakshasas. Ravana, their King, was ruling at Lanka. He had his outpost at Janasthana very near Panchavati, where he had stationed fourteen thousand of his armies under the command of Kara, Dushana, and Trisiras. The rishis sought the aid of Sri Rama. Sri Rama, without any murmur, consents to help them. This was not palatable to Sita. She takes Sri Rama to task for assenting to the request of the rishis. One whole chapter is devoted to her giving advice to Sri Rama on this occasion. She says that three things are essential for a man to stick on even in the face of direst perils and they are (1) Speak the truth (2) Never commit adultery and (3) Never go to war without a just cause. Of these the first two are true in the case of Sri Rama. But how, then, can he keep the promise granted to the rishis? Till then there is no cause for fighting the Rakshasas. She wants to create one, and she creates one by separating herself from Sri Rama. This is also aggravated by another cause. She has seen with her own eyes the rishis suffering at the hands of the Rakshasas. She has not the patience to bear the pains suffered by them. Cannot something be done to allenate their distress? She succeeds to a great extent in this respect in the first separation and thus procures a name and respect for her consort, Sri Rama. The whole lot of the Rakshasas,

including Ravana, are killed in the war. Bharadwaja, the Sage, who had scant respect to Sri Rama at the first meeting, looks upon him with a different eye when he meets him a second time. He feeds the whole army of the Vanaras.

On a second occasion she separates from her consort. She is pregnant and is about to give birth to twins. Then at that time, she expresses a desire to go to the forest and live with the rishis as of old. By that time the citizens of Ayodya had scant respect for Sita. They had spread all sort of rumours as regards her chastity, as she had lived in captivity at Lanka for one year. Some how Sri Rama comes to know of it and he wants to get rid of her. He avails himself of this proper opportunity and sends her away to the forest with Lakshmana. She is left in the forest without a friend. Here Sita resigns herself to her present state of grief. In this case she has also a set purpose. She wants to show to the world what the Dharma of the Pativrata is. The women have no separate existence. They have to look after the comforts of their husbands and they must implicitly obey them.

On a third occasion she separates herself from Sri Rama. Even then she had a set purpose. Valmeeki takes her to the place where Sri Rama is performing the horse sacrifice. Sri Rama has made a golden image of Sita and is conducting the sacrifice. He refuses to have to do anything with her. Then she makes a terrible vow. She says, 'I have never thought of any person other than Sri Rama. If what I say is true let the earth give me a residence.' At once there is produced a cavity in the earth, and she enters it. Here she manifests to the whole world that a woman has to think always of her husband and never deviate from the true path of Dharma.

Thus we find that Ramayana delineates two ideal characters. Sita and Rama.

The other epic, Mahabharata, centres round Draupadi, a feminine character. Her disgrace at the hands of Dussasana in the

court of Duryodhana leads to the great Kurukshetra War. Read the whole epic. The plot reads as though it is written to enunciate the theory, 'Existence is an evil. Samsara is an evil. Try to get away from the trammels of it.' In the epic itself a number of great personages are introduced. Of these many die in the great war. The Yadavas die fighting each other thirty-six years after the great war. The rest become so disgusted with life that they commit suicide. Viduhra fasts himself unto death. Dhritarashtra, Kunti, and Gandhari are enveloped in a forest fire which they themselves had created. The Pandavas also want to give up their life. They went to the Himalayas in search of the glaziers. They die there. Yudishtira alone fails in his attempt. It is stated that truth alone saved him from committing suicide. Later it is said he gives up the human body and goes to heaven. Only one person, who has

no worries is Kripa, the Brahmin, who taught the Kauraves and the Pandavas archery in the early stages. He escapes death. The length of Aswathaman's life has been determined in the Mahabharata war. He has to live three thousand years after the Mahabharata War.

One important fact to be noted is this. Sri Krishna goes as a messenger to the court of Duryodhana just before the war. It illustrates how he serves his devotees faithfully, a thing that must not be forgotten by every one.

Incidentally we find what high and noble truths the Gita expounds for us. There the various paths of attaining God are given. They are (1) Karma Yoga (2) Gnana Yoga, (3) Bhaktiyoga and (4) Prapattimarga. Sri Krishna enjoins us to do our duty and not to shirk away from it. Only he attains God whom he elects.

THE SMALL MULTIPLICATION

By MR. S. C. DUTT

IN the sixteenth century certain arithmetical processes were introduced by the merchants and negotiants of Italy for the expediting of business calculations. These have been variously described as rules of practice, brief rules and the small multiplication. The last caption aptly describes the processes in as much as they provide an alternative method of obtaining the result of multiplication. These processes have in our school been exclusively confined to money and costs in the traditional arrangement of simple and compound practice. The work usually begins with countless examples of the article variety as: "Find the cost of 458 articles at Rs. 8-5-4 each and ends with sums on the calculation of prices as: Find the price of 273 maunds 33seers 7 chhataks at Rs. 53 8as. per maund. It has been rightly observed in the "suggestions for the

teaching of arithmetic" (circular 807) that apart from the requirements of a few special businesses such questions are unreal. They serve only as a test of accuracy in the fundamental operations applied to compound quantities but such accuracy can be obtained equally well in other ways.

If arithmetic is to be viewed as a subject which affords wide scope for reflection and judgment rather than as a composite of unrelated skills the narrow rigid view of practice as a type of sum should give place to the board elastic view of what is undoubtedly an alternative method of obtaining the results of multiplication and a process capable of very wide application. "It must no longer be thought or taught," as Potter in his book 'The teaching of arithmetic' rightly observes, "as a stereotyped kind of sum but as a method to be employed

on every convenient occasion." Practice in this wider sense is a process which consists of selecting such a system of units for the multiplier as will enable us to convert it into a fraction or a series of fractions so that we may attain the result by the simple process of short division. This selection of a suitable unit and the subsequent conversion of the multiplier into a series of fractions leave much room for individual variation and, thus viewed, as a method practice becomes a personal matter depending upon each individual rather than a type of sum to be taught or learnt in stereotyped form.

Indeed much of the weakness of practice as it is treated in the text books in use in our schools is due to their insistence on the chosen unit always being £1 or Re 1 and on the necessary conversion of the multiplier as aliquot parts of £1 or Re 1. In setting examples on practice the teacher should, therefore, emphasize the unit to be selected for the multiplier and respect individual variation manifested in the selection of such unit. In calculating the product 13as. 4p × 37 one may be justified in choosing Re 1 as the unit and set out the work as follows:—

13 as 4p × 37	
unit Re 1	
	Rs. As
	37
8as = $\frac{1}{2}$ of Re 1	18 8
5as 4p = $\frac{1}{4}$ of Re 1	12 5 4
	30 13 4

But in the following sum Rs. 10 will be found to be a more convenient unit:—

Rs. 16. 11as. 6p × 46	
unit Rs. 10	
	Rs.
	460
Rs. 5 = $\frac{1}{2}$ of Rs. 10	230
Re. 1.4as = $\frac{1}{4}$ of Rs. 5	57.8
5as = $\frac{1}{4}$ of Re 1.4as	14.6
2as 6p = $\frac{1}{2}$ of 5as	7.3

It has already been pointed out that Practice is viewed not as a type of sum confined solely to costs but as an alternative method of obtaining the result of multiplication.

The following examples illustrate how the method can be very conveniently applied to multiplication of integers as well as of vulgar and decimal fractions:—

Examples:— (a) 5879 × 175

unit 100	
	587900
50 = $\frac{1}{2}$ of 100	293950
25 = $\frac{1}{4}$ of 50	146975
	1028825

(b) 872 × 7 $\frac{1}{2}$ unit 10

	8720
5 = $\frac{1}{2}$ of 10	4360
2 $\frac{1}{2}$ = $\frac{1}{2}$ of 5	2180
	65440

(c) 2584 × 675

unit 1	
	2584
5 = $\frac{1}{2}$ of 1	1292
125 = $\frac{1}{4}$ of 5	323
05 = $\frac{1}{10}$ of 5	01292
	17442

Examples involving costs of compound quantities are usually known as compound practice and in dealing with it there is room for greater ingenuity than in the case of simple practice. The following sum may for instance be worked out in either of these two ways:—

Find the cost of 5 cwt. 2 qrs. 14 lb. of butter at £ 2. 5s. 6d. per cwt.

(a)	£ s d	= cost of 1 cwt
	2 5 6	
	5	
	11 7 6	= „ 5 „
2 qrs = $\frac{1}{2}$ of 1 cwt.	1 2 9	= „ 2 qrs.
14 lbs. = $\frac{1}{4}$ of 2 qrs.	0 5 8 $\frac{1}{4}$	= „ 14 lbs.
	12 15 11 $\frac{1}{4}$	= „ 5 cwt.
		2 qrs. 14 lb.

(b)

at £1 per cwt = 5s. per qr. = 2 $\frac{1}{2}$ d per lb.

∴ cost of

5 cwt. 2 qrs. 14 lb

is £5 10s 30d @ £1 per cwt

or
£5 12s 6d

	2	
5s = $\frac{1}{4}$ of £1	11 5 0	@ £2 per cwt.
6d = $\frac{1}{10}$ of 5s	1 8 1 $\frac{1}{2}$	„ 5s. „
	0 2 9 $\frac{3}{4}$	„ 6d.
	12 15 11 $\frac{1}{4}$	„ £2 5s 6d per cwt.

Then again the sum can be reduced into one of simple practice by the decimalization of either the quantity or the price involved.

The practice method may also be readily applied to the calculation of rates, simple or compound interest, percentages and the like. Here are a few illustrative examples:—

Rates and Taxes

What is the income tax payable on Rs. 237 8 as at 2as 6p in the rupee?

	Rs.	as.	p.
	237	8	0
2as = $\frac{1}{2}$ of Re. 1	27	3	0
6p = $\frac{1}{4}$ of 2 as.	6	12	9
	33	15	9

Simple Interest

Find the simple interest on Rs. 639. 9 as. 4 p. for $4\frac{3}{4}$ years at 3 per cent per annum simple interest.

Int. for $4\frac{3}{4}$ years = $\frac{3}{4} \times 3$ or $14\frac{1}{4}$ per cent.

(a) unit Rs. 100.

	Rs.	as.	p.	
	14	4	0	= Int. on Rs. 100
			6	
Rs. 25 = $\frac{1}{4}$ of Rs. 100.	85	8	0	= " Rs. 600
" 12. 8as. = $\frac{1}{2}$ of Rs. 25	3	9	0	= " " 25
" 2. 1 as. 4p = $\frac{1}{4}$ of Rs. 12. 8 as.	1	12	6	= " " 12. 8 as.
	0	4	9	= " " 2. 1 a. 4 p.
	91	2	3	= " " 639. 9 as. 4 p.

(b) unit 100 per cent.

	Rs.	as.	p.	
	639	9	4	= Interes at 100 per cent.
10 per cent. = $\frac{1}{10}$ of 100 per cent.	63	15	4	= " 10 per cent.
$2\frac{1}{2}$ per cent. = $\frac{1}{4}$ of 10 per cent.	15	15	10	= " $2\frac{1}{2}$ per cent.
$1\frac{1}{4}$ per cent. = $\frac{1}{8}$ of $2\frac{1}{2}$ per cent.	7	15	11	= " $1\frac{1}{4}$ per cent.
$\frac{1}{2}$ per cent. = $\frac{1}{5}$ of $2\frac{1}{2}$	3	3	2	= " $\frac{1}{2}$ per cent.
	91	2	3	= " $14\frac{1}{4}$ per cent.

Percentages

Find $7\frac{3}{4}$ per cent. of Rs. 37. 8 as.

	Rs.	as.	p.
	37	8	0
5 per cent. = $\frac{1}{20}$ of 100 per cent.	1	14	0
$2\frac{1}{2}$ per cent. = $\frac{1}{8}$ of 5 per cent.	0	15	0
$\frac{1}{4}$ per cent. = $\frac{1}{10}$ of $2\frac{1}{2}$ per cent.	0	1	6
	2	14	6

Illustrations of the applications of this useful method may thus be multiplied indefinitely. One of the advantages of this method is that it facilitates approximation. For, in practice, division is substituted for multiplication and as the operation of division always proceeds from left to right the process removes any difficulty of determining the position of the decimal point.

—(The Bengal Teachers' Journal)

SPEED IN WRITING

THE question of the speed of writing which should be expected from children at various stages, has recently been raised. Teachers will note that in the Course of Instruction for Primary Schools, the objective of attaining "a rapid, graceful, and legible style" is set forth. Emphasis is laid first upon legibility rather than upon speed, although it will be noted that in the suggested activities for fifth and sixth classes, practice to secure speed is indicated as one section of the work. It is not intended to specify any standards in writing speed which might be regarded as a Departmental requirement, but teachers may be interested in the results of several investigation which have been carried out concerning this matter in other countries.

Investigations made in America by Thorndike and Freeman have suggested that the following rate should be obtained with fair legibility in each of the school grades. The speed is in terms of letters per minute.

Grade: II III IV V VI VII VIII

Speed: 30 44 51 60 63 68 73

Another investigation made by Starch indicated that business requirements are that a pupil should be able to write 83 letters per minute on leaving school. This appears to be an unduly high standard and the general opinion among other writers is that a speed of 70 to 80 letters per minute is to be sought. The following suggestion is offered as a means for measuring the rate of writing. A suitable portion of prose or poetry should be memorized by the pupils. Ask the pupils to write out this memorized portion at their ordinary rate; stop them at the end of two minutes. Then say, "Now I want you to write out the same passage as quickly as you can; do not write so fast that I will not be able to read what you write, but write as quickly as you can." Stop them at the end of two minutes. Then say, "Now write out the passage as well as you can; do not hurry at all this time, try to do your best writing." The average number of letters per minute on the three samples should then provide a good indication of each pupil's writing rate.

(Educational Gazette, New South Wales.)

BOOK REVIEWS

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"God is the same all the world over." Her child was brought up as a little Indian boy from his earliest age. She says that although India has not changed her, she has become Indian. "That is the falseness of these labels, 'Indian' and 'English'. It is we who exist and make a nation. I too am dust that England bore, shaped, and made aware." Yet I am living in an Indian way, with Indian clothes, with an Indian husband and child on Indian soil, and I cannot feel even the least barrier or difference in essentials between myself and the new country I have adopted. For there are things deeper than labels and colour and prejudice, and love is one of them."

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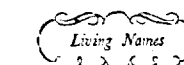
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EDITORIAL NOTES

A DOUBLE Pamphlet, No. 15 in the series of Oxford Pamphlets on Indian Affairs, has been recently issued. It is very instructive and useful, as being an attempt at planning integration between the various compartments in the structure of Indian Education; and its preface suggests a need and that an urgent one, for creating a central co-ordinating authority with power to implement its plans in the fields of primary and adult education, reform in which is long overdue, for producing effectiveness, as well as extension, of University education which requires modification in certain fundamental features and of technical education which has got to be very largely improved and developed.

In the matter of primary education, the writer Mr. K. G. Saiyadin, who was for long a Professor in the Aligarh University, and is now Director of Education in Kashmir, gives a history of the beginnings of the educational system under British rule, stressing the Primary Education Acts passed by the different Provincial Governments on the eve of the inauguration of Montford Reforms, with a view to introduce some attempt at compulsory primary education.

The general outline of these Acts was to give local bodies the authority to introduce at their option compulsory education between the ages of 6 and 10, within any part of their jurisdiction and under Government sanction. This primary education was intended to be free in many provinces, but in some like Bengal, the Acts laid it down that "it shall not be ordinarily free." This half-hearted introduction of compulsion under the aegis of bodies which have neither financial resources, nor strength and initiative of purpose, was naturally non-productive of fruitful results; and the attempt has generally failed in almost all areas. Compulsion is certainly inevitable, and it

should be regarded rightly, as neither uneconomical, nor productive of wastage. A strong plea is put forward for its being made entirely free on the basis that it is the fundamental civic and human right of all members of the society and the state. It is urged by Mr. Saiyadin that there is at present an abrupt and upsetting lack of continuity between the child's life at home and the school atmosphere. But one may plead that all attempts hitherto made to remove or lessen the artificiality of the primary school and its methods and scope of teaching have not succeeded. The scheme of Basic National Education adumbrated in 1937-8 under the auspices of the Congress, is admitted to be the most significant and radical attempt so far made to reconstruct primary education according to this point of view. In that scheme a compulsory course of instruction for seven years from the age of 7 to 14 is postulated, as also, the relation of that stage of education to the basic interests of the child mind and the basic occupations of community life. The hope is entertained that, in spite of the apparent setback to the scheme, it will produce a powerful influence in the shaping of educational policy, particularly because it would have shaped primary education not in terms of the needs of the upper and urban classes, but as being closely related to the socio-economic life of the rural community.

Then, we can all be hopeful that life with such a spread of this system would be more closely correlated to education, which, in its turn, would function in what might be called a live atmosphere. Naturally enough, our author stresses educational reconstruction as an essential part of national planning. In this connection we may take the liberty of adverting to the bold scheme framed by Mr. John Sargent, Educational Commissioner with the Government of India, for the improvement of teachers in status and prospects and the reorganisation of the course of education, which scheme would

involve a tremendous lot of expenditure amounting to hundreds of crores, but should at the same time be implemented in the full conviction that it is a fundamental national investment, as necessary for the preservation and promotion of the nation's prosperity as war expenditure and investment in railways and irrigation works, and in famine relief, perhaps more so.

Secondary and higher education was developed so much by Wood's Despatch of 1854, but became top heavy for the whole system. The findings of the Hunter Commission, of the University Commission of Lord Curzon and of the Calcutta University Commission of 1917 have revealed the various faults and defects of the whole system which has been dominated by a narrow syllabus, by the over weighting of literary studies and by the over importance of examination.

So far as the High School is concerned in its relation to University courses, the main demand that has been increasing in volume and in urgency, is for a strengthening and prolonging of the High School course so as to take up either a part or the whole of the Intermediate course. In spite of the academic soundness of making our well-trained Matriculates able to begin a course of real University instruction and of confining the recruitment of students to Colleges to the circle of the best developed pupils, most educational authorities in India and a large section of the public as well, have been averse to the implementing of this change. It is to be hoped that the reorganisation of the scheme of under-graduate studies in the Delhi University recently made under the auspices of Sir Maurice Gwyer may be followed by their Universities and institutions.

Mr. H. V. Hampton, a retired Principal of the Bombay Secondary Training College, who writes on the section of Secondary Education, thus points out in forceful language how the present system is rigid and inelastic and dull and antiquated: "When the present position is viewed in

its proper historical perspective, it seems reasonable to conclude that the secondary school system suffers from arrested development: it has failed to keep pace with the changes—social and political, economic and industrial—which have gone to the making of modern India, and it has failed to keep abreast of the latest developments in educational theory and practice. Schools are weighed down by the incubus of Matriculation and fettered by regulations governing 'recognition', courses are bookish and theoretical and provide little to attract pupils with a practical turn of mind; the excessive use of English as the medium of instruction places a severe psychological burden on both pupils and teachers—it stifles individuality, encourages memorization and makes instruction lifeless and mechanical; scientific and practical subjects are neglected and inadequate provision is made for outdoor games and other recreational activities."

One remark that we may be permitted to make in this connection is, that in spite of numerous committees and commissions and ponderous reports little has been done at any real improvement of the whole system, and we quite agree with Mr. Hampton that the High School in a great majority of cases is much the same as it was in 1904, and but little changed from what it was in 1884.

Professor Amarnath Jha, Vice Chancellor of the Allahabad University, takes up the section on Universities. He comprehends the encouragement of original research and the formation of character, so as to bring out intellectual honesty and moral integrity among the main purposes of University education. He is a believer in the very useful work that has been achieved by our Universities in the past with the limitations under which they have been placed. Though he himself is a Professor of English and fortified with a full sense of its value as a global and international language, he advocates the importance and the necessity of imparting University instruction in Indian languages.

He does not under-estimate the practical difficulties that stand in the way of effecting such a change. But he feels that the use of English as the sole medium of higher instruction in our colleges has tended inevitably to the judging of the progress of the student, not on the basis of his knowledge and real learning, but by the degree of skill with which he uses the foreign medium. He is also alive that Universities at present are neutral, in other words indifferent and oblivious to the importance of moral and religious education. Likewise, he deplors the lack of any endeavour to relate University education to the needs of masses and the consequent gulf by which University-men have been separated from the vast majority of the people of whom they should be the natural leaders and teachers. It would have been better if Professor Jha had declared more strongly his views as to the several directions in which this correlation could become fruitful, beyond, merely indicating the value of settlement work, literacy centres, social service associations and adult education schemes, all of which are, according to one section of opinion, more appropriate schemes to be embarked upon by public workers and by quasi-public and philanthropic associations, in order that they may be fully productive of that extent of improvement on the public mind that would really be permanent. Rightly does Mr. Jha stress mutual tolerance as an object of development in Universities and as being the most potent instrument by which particularism, communalism and superstition and social injustice can be removed.

Coming to the province of adult education, Mr. R. M. Chet Singh who has been engaged in adult education for many years and who is the General Secretary of the Indian Adult Education Association, gives a brief survey of the various types of activity at present operating in that field, both official and non-official, missionary and indigenous. The wealth of valuable experiments made should not blind us to the fact

that literacy does not constitute adult education, as has been so often assumed, and that primary education and adult education are not mutually antagonistic or superfluous to each other. He pleads for the creation of special officers in the Education Department and in each University and in each local body, whose sole duty should be to sponsor and direct all kinds of adult education effort; and above all, he stresses the magnitude of the task and would say that it should be the main duty of the Central and Provincial Governments to further it. While the Central Government should give a lead in this matter to the subordinate administrations, that Government should produce a literature indicating the value of adult education and rendering available the experience of other countries. It must encourage voluntary bodies with grants-in-aid, and regard the spread of adult education as being the most potent instrument for educating India into true democracy. It is considered by authoritative opinion that even years of compulsory primary education cannot raise to any appreciable extent the percentage of literacy and that great discernment should be shown as to the right kind of effort. Therefore it is all the more important that the movement for adult education and literacy should always be kept at a very high level.

In the field of technical education our backwardness has been truly recognised to be a part of the larger political problem. Even to-day progress in technical education remains only sporadic and casual. The need is really great for the multiplication and expansion of technical colleges which will produce specialists. Training of a lower standard has been very useful to create skilled workers in several branches of industry; and in this matter the opinion of experts is that the educational course in technical schools should be most closely correlated to training in workshops and factories. The national tradition of art and craft conserved in handicrafts and small scale industries should also be preserved and encouraged.

Vocational guidance is most necessary at every stage of education and an effective scheme of such guidance will help to prevent drift and wastage in a large measure. Technical education of whatever grade should be soundly built on elementary general education and secondary education. The question of terminology to be adopted in the teaching of scientific and technical subjects in the Indian languages has become an urgent one and the different schools of thought in this matter are indicated by the expert writers of this part of the book—Messrs. K. Venkataraman and P. N. Joshi, both of Bombay.

We can quote without being regarded as prolix, their recommendations on this subject: "To limit technical education to the exact demands of industry at a given time would be to take too narrow a view of the aim and scope of technical education; on the other hand there is little to be gained by training for unemployment, in whose wake will follow discontent and demoralization. It is a vicious circle, from which the only escape is a realization of the organic relations between industry, education and the state. Our model must be Russia, whose position when the Soviet Government took over was in many ways similar to ours at the present time."

The Address of Sir R. K. Shanmukham Chettiar, delivered at the recent Convocation of the Annamalai University, called for voluntary social service on the part of our educated young men, which he held to be the very useful means of filling up a gap in our cultural effort. He says that the missionary spirit of social service seems to be alien to our temperament and upbringing, which, though not sustainable, is still a fact. Another point on which he laid stress is the study of the mother tongue which he said, should not be relegated to a minor place in any educational institution, least of all in a University centre; and thus would he reconcile the plea for the revival of interest in

the indigenous tongues with the national renaissance that is surging over the whole land: "Of late there has been a revival of interest in the study of the vernacular languages and there is a spirit of renaissance in the different cultures of India. I am not one of those who look upon this as a fissiparous tendency threatening the unity of India. In fact I consider that those who oppose the spirit are the enemies of Indian nationalism. For, they forget that Indian culture and Indian nationalism are the synthesis of different cultures and multi-national forces each with great traditions and a strong individuality."

In the Madras University Convocation Address delivered by Diwan Bahadur Justice P. Venkataramana Rao, attention is drawn to the value of developing Indian contacts with other nations, especially in the birth and development of the new idealism that is now emerging. That idealism will, it is expected, be based on a cosmopolitan outlook and a collectivist structure and care should be taken that nationalistic trends should not be allowed to contradict this cosmopolitan growth. Similarly in the relatively smaller field of Indian national development, communalism should be subsidiary to nationalism and not a rival to it.

Sir B. L. Mitter in the course of his Address at the Convocation of Travancore University, advocates the acceptance of President Roosevelt's Four Freedoms as our aims in life, *viz.* Freedom from Fear, Freedom from Want, Freedom of Speech and Freedom of Worship. This ideal will create a healthy public opinion and help in the achievement of higher standard of life for all. In India there is the double danger of aggression by unscrupulous neighbours and also of the destruction, which would be effected by forces of internal disintegration. Of these latter forces, mutual intolerance is perhaps the worst. But others like Sectionalism and vested interests are nearly as bad.

Sir John Colville, speaking before the Bombay University Convocation, dwelt on

the enormous quickening of the industrial pulse of India and on the duty of University men to help in the solving of many problems like unemployment, social evils, re-organisation, etc., which are bound to rise on account of that quickening. It is the duty of all University men to help in solving these problems in such a manner as will make for a gentle, ordered and non-violent social and economic transition.

Dr. Sir J. C. Ghosh, is a great scientist; and speaking before the Mysore University Convocation, naturally enough he urged the assimilation to industries and agriculture in India of the characteristics of the present age revealed by scientific research. Otherwise the country will stagnate. The purpose and content of education should be not the spread of a culture which is a relic of the dead past but the adjustment of each individual to the task which it is his or her most worthwhile to do. Thus will every individual be rightly employed, particularly every educated individual, and a great national wrong of misdirected effort or enforced idleness be removed.

At the Nagpur University, Sir Mirza Ismail urged University men to solve the social, economic and political problems confronting the land and held up the value of the spirit of compromise, based on moderation, mutual understanding and respect and of self-discipline of thought, feeling and behaviour, which are so valuable in the work of the reconstruction of our society. He described how a conscious and deliberate harmony alone will produce a friendly atmosphere without which no national problem could be solved and how this harmony might be made more fruitful by a sense of national patriotism.

We congratulate the Lucknow University on the movement they have started for

III. Commemoration of the services of Dr. Radha Kumud Mookerji

as a teacher, a researcher and a publicist of markedly nationalistic tendencies has enabled him to stand out as one of the most distinguished educationists and savants of the present generation. It is a happy thought on the part of the Committee that has been working to present a commemorative volume of essays in his honour, to perpetuate his name by making a most liberal endowment in the Lucknow University for an annual lectureship of suitable value on any subject connected with Indian History and civilization, for the revealing and interpretation of which the Professor has been striving in his numerous publications and speeches for nearly four decades. His charming personality and his great gifts of exposition, expression and analytical powers have made him one of the tallest historians of the country and one of the most vigorous exponents of culture and national re-organisation from the cultural and other points of view. We congratulate the R. K. Mookerji Commemoration Committee on the most representative character that they have secured for the movement and on the happy idea of lectureship which they have implemented in the name of the Professor and of which they have secured the services of that great and loyal and jurist, the Hon'ble Sir S. Varadachariar, as the first lecturer. We offer our heartiest congratulations to the Professor and wish him many long years of useful and vigorous service to the Muse of History and to the interpretation of the spirit of Mother India.

commemorating the services of Professor Dr. Radha Kumud Mookerji, M. A., Ph. D. P. R. S., Professor of History in the Lucknow University, rendered in the different spheres of national life. His unique experience



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