REGD. NO. M. 272.

THE EDUCATIONAL REVIEW

A Monthly Record for India.

VOL. XXXVI.] NOVEMBER 1930 [No. 11.

CONTENTS.

Annual Subscription inclusive of Postage, Rs. 4. Half-yearly Subscription, Rs. 2.

MADRAS: SRINIVASA VARADACHARI & CO.

Foreign ... of RAS

ELEMENTARY MATHEMATICS

BY

Rao Bahadur P. V. SESHU AIYAR, B.A., L.T., I.E.S.,
Retired Principal, Govt. College, Kumbakonam.

AND

V. VENKATASUBBAYYA, B.A., L.T.
Headmaster, High School Dept., Pachaiyappa's College, Madras.

Part I for Forms I to III. 8th Edition, Cr. 8vo. 550 pp. **Rs. 2**

Approved as a Text-book for Secondary Schools, *Fort St. George Gazette*, 4th June 1912, and **Cochin Govt. Gazette**, 15th June 1912, and for **Schools under Public Management**, *Fort St. George Gazette*, 3rd December 1913; also at p. 642, Part I-B, dated 21-6-21.

Part II for Forms IV to VI. 6th Edition, Cr. 8vo. 612 pp. **Rs. 2.**

Approved as a Text-book for Secondary Schools, *Fort St. George Gazette*, June 1915; and for **Schools under Public Management**, *Fort St. George Gazette*, July 1917; also at p. 642, Part I-B, dated 21-6-21.

TAMIL EDITION.

Adapted and translated by S. Sivaraman, B.A., L.T., Mathematics Assistant, Salem College.

Part I for Form I. Cr. 8vo 293 pages. **12 As.**

Approved as a Text-Book suitable for School use, vide *Fort St. George Gazette*, Part I-B, dated 1-11-27.

Part II for Form II. Cr. 8vo. 208 pages. **10 As.**

Approved as a Text-Book suitable for School use, vide *Fort St. George Gazette*, Part I-B, dated 1-11-27.

Part III for Form III. Cr. 8vo. 300 pages. **12 As.**

Approved as a Text-Book suitable for Class use, vide *Fort St. George Gazette*, Part I-B, p. 513, dated 13-11-1928

TELUGU EDITION.

Adapted and translated by A. Jayaram Rao, B.A., L.T., and S. Krishna Rao, B.A., L.T., Board High School, Kavali.

Part I for Form I. Cr. 8vo. 294 pages. **As. 12.**

Part II for Form II. Cr. 8vo. 208 pages. **As. 10.**

Approved as Text-Books suitable for School use, vide *Fort St. George Gazette*, Part I-B, p. 5[illegible], dated 13-11-28.

Part III for Form III. Cr. 8vo. 303 pages. **As. 12**

Approved as a Text-book suitable for School use, vide *Fort St. George Gazette*, Part I-B.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

A COURSE OF GENERAL MATHEMATICS FOR HIGH SCHOOLS

Written in accordance with the recently-revised S. S. L. C. Syllabus in Elementary Mathematics

By V. RAGHUNATHA AIYAR, B.A., L.T.
Dy. Inspector of Schools, Ambasamudram.

6th Edition. Cr. 8vo. over 570 pages and 200 diagrams. **Rs. 2.**

Approved as a Text-book for Schools under Public management,
vide *Fort St. George Gazette*, Part I-B, p. 641, dated 21-6-21.

Approved as a Text-book suitable for school use,
vide *Fort St. George Gazette*, Part I-B, p. 877, dated 21-9-21.

Prescribed as a Text-book for 1930-31 for Elementary and Additional Mathematics for High School Forms by the Govt. of Mysore, *vide* Notification No. D. 50, dated 23-12-29.

TAMIL EDITION—(*Almost Ready.*)

By

V. RAGHUNATHA AIYAR, B.A., L.T.
Deputy Inspector of Schools, Ambasamudram.

The Tamil rendering of the above book is specially issued so that pupils in the Tamil districts who are weak in General Mathematics may secure with ease a decent degree of efficiency in it. A course through the book may reveal that offering to answer the S. S. L. C. General Mathematics Paper in Tamil is a point of tage indeed to the pupils.

Advance copies of the first 208 pages of the book have been issued to enable such ie schools as wish to adopt the vernacular medium to do so from the beginning of this ol year.

Part I. D. Cr. 16 mo. 208 pages. 10 as.
Part II. Do. almost ready.

SRINIVASA VARADACHARI & CO. 4, MOUNT ROAD, MADRAS.

The Educational Review

A Monthly Record for India.

VOL. XXXVI.] NOVEMBER 1930. [No. 11.

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

All remittances and communications regarding advertisements, &c., should be forwarded to the Publishers, EDUCATIONAL REVIEW, *Office, No. 4, Mount Road, Madras.*

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

SECOND MALABAR DISTRICT EDUCATIONAL CONFERENCE, PALGHAT.

PRESIDENTIAL ADDRESS

By

MAULVI ABDUL HAMMID SAHIB BAHADUR, M.A. (OXON.)

District Educational Officer, South Malabar.

AN Inspector of Schools, is, in some ways, not the person who should preside over an important annual gathering of teachers, for, like the driver of an engine, he is always too near the pistons and the cylinders and too much in the grime and smoke to be able to see the system, as an outsider would, with an admiring eye. The complete layman is equally useless, because his untrained eye cannot perceive defects in transmission, such as the slipping of the clutch or the low tension of the cables. A lawyer seems to me, of all persons, the best, for, he is gifted with the ability to assume different personalities at will, and to talk for all of them exactly as they would. I am glad therefore you have tried wisely, to counterbalance the natural shortcomings of an Inspector, by seeking out very aptly an able lawyer to function as the Chairman of the Reception Committee.

In asking me to preside over this Second Conference of your Guild, you have done me a signal honour, for, I know there are among you many who would have performed this duty with greater ability and distinction. The President of the Conference is expected to cover a wide field and to raise important issues for your consideration. In entering on my work, I am conscious not so much of the honour done to me, as of the serious responsibility you have imposed. It is at no time easy to discourse with knowledge and precision on any subject, and here, the task is made more difficult because my remarks

have to be addressed to a distinguished assembly, almost everyone of whom is a critic, with inexorable standards.

Every country expects from its teachers a correct lead on all national questions. If there is a set of people who could be relied upon to apply trained minds to set problems, it is the teachers. At this moment when a section of society is swayed by sentiment into loose thinking, it is the duty of teachers to restore poise and equilibrium. We would, in my opinion, be failing in our duty if we did not as far as it affects us, condemn in strong language the methods that extremists are employing to distract the attention of young children from their legitimate work at school. Patriotism is to-day an outworn creed, in the same way as religious bigotry is a played-out enthusiasm. We have, like every one else in the world, to think in terms of humanity, we have to destroy the demons of hatred and put in their place the angels of love.

Before we proceed to review some of the more immediate problems confronting us, it would be well to spend a few minutes in pausing to think whether we are proceeding on the right lines with the present system of our education. The system of which we ourselves are the products and which we are now trying to work is entirely Western in its origin. I think it would not be wrong to say that it began to be applied systematically from about the year 1823 when the whole principle underlying it was gone into in detail in that famous Minute attributed to Macaulay. It marked a distinct change from the old to the new inasmuch as it brought to the East, for the first time, a spirit of objective inquiry. That it is an improvement on the old system has to be acknowledged in view of the results achieved. It has brought a new message to the peoples of the East and infused into them a new outlook; it has had the effect of developing a national consciousness, and in India, particularly, it has energised a peace-loving agricultural population. If it is conceded that the principle underlying it is good and sound, there seems to me no reason why we should not strive to make as much of a success of it as we can.

The view is sometimes advanced that Westernisation is harmful to Eastern peoples, and that it is like new wine being poured into old bottles. While there is a measure of truth in this statement, it does not seem to me a valid ground for the rejection of the whole system. My own view is, the more of it the better. This becomes more clear when it is realised that Westernisation and Democratisation go together, and that we cannot hope to democratize our institutions without sufficiently Westernising our outlook.

It is never possible to devise a system of education that would suit a country for all time. In all progressive countries, the whole machinery of education is constantly examined and re-examined. New points of view always stimulate and suggest new approaches to the question. In our country the time has come for an entire examination of the whole machinery, and I shall not be surprised if there is in the next five years, a Royal Commission on Education.

In Madras the limit of numerical expansion has long been reached. The expenditure on education to-day ranges between four to five crores which is roughly a third of the whole of State revenue. Clearly more funds than what are being applied cannot be spent on new schemes of development, and the educational machinery of the State has therefore been carrying on, meeting existing commitments from year to year. What every enthusiast has now to do is to examine whether the money spent is yielding satisfactory results.

There are certain features of our educational system which are not to be found in other countries in the world. These are its cheapness and its lack of definite aim. I say cheapness because our system makes it possible for the poorest of the poor to pass through all its stages. Our Secondary and Collegiate systems are admittedly the cheapest in the world, and it is in our country more than in others that young people pass on from Elementary to Secondary and Secondary to Collegiate stages without a definite aim. The most burning question seems to me to be the question of defining the scope and purpose of Elementary, Secondary and Collegiate stages of education.

Having regard to the fact that the country we live in, is vast, and has to support an increasing population, we ought to arrive at a decision as to whether it is really necessary or desirable that such large numbers should, as they do at present, aspire for an advanced general education. The Elementary School with Standards I to VIII should really be the place where nine-tenths of the population should graduate from. As at present, this stage of education should, as far as possible, be free. The Secondary School should be for the relatively few, who can afford the cost of that form of education, while College education should admittedly be confined to those who show marked propensity for the learned professions. The evils that most people attribute to the present system of education seem to me, at least in part, due to the absence of this well-marked gradation.

It would follow from this that Secondary and Collegiate education should be confined to a relatively small percentage of the population and that it should be less cheap than it is now. It is because the fee collection is meagre, that salaries of teachers are low. If, for instance, the rate of fees is doubled, it would be possible for all managements to raise salaries by at least 50%. It ought to be easily possible to devise a scale of fees suited to the purse of the parent. My view is that the salaries paid to the members of the teaching profession should everywhere be raised and as far as possible standardised. Looking at the present conditions, I am convinced that the State cannot shoulder the burden of increased salaries and that the problem will remain unsolved unless the parent is prepared to tax himself a little more.

A question that we might consider is whether schools in this Presidency have deteriorated during the last two decades. It is very difficult to give a ready answer to this, but as far as one can see, there is everywhere a sense of slackening of effort, and schools are no exception. This seems partly to be the result of the withdrawal of the State from direct management, and partly of the disturbing effects that politics have had on national life. It is quite possible that the belief in the utility of honest work is weakening gradually, because, the agencies which appreciate and reward good work have withdrawn in favour of those, which are not able to, or at least not interested in, distinguishing between good and bad work. The remedy for this state of affairs seems to

me to lie in the exercise of more tact and judgment by the Inspectors of Schools, and in the State assuming more direct responsibility, without stifling freedom of initiative or enterprise in local agencies.

On the questions affecting the every-day life of teachers, considerable literature is always being produced everywhere, and there are people who frequently write and speak on these questions. Topics such as curricula of studies, the need for vocational training, vernacularisation of non-language subjects, the need for play-grounds and organisation of team games, the desirability of establishing contact between Education and Industry; these are subjects always discussed, and to the extent to which it has been possible for the State to initiate action, a certain measure of progress has been achieved. Many of these are schemes which it is not possible for the State to finance wholly which is the reason why the achievement of the ends is being delayed.

There are certain things like better organisation of the teaching profession, the improvement of the teachers' social status, the need for co-ordinating school-work with the social life of the community which I should like considered.

There are many evidences to show that the teacher has, in consequence, probably, of his low wages, developed what may be called an inferiority complex. He has been much too humble, self-effacing and ready to compromise, in the past. If teachers are not free men with a buoyant, cheerful outlook, the work they do is bound to be of poor quality, because they would work not in the spirit of free men but of hirelings and mercenaries. I am afraid it is not possible to remove at once these handicaps, but the development of a sense of the importance of their profession, and a better organisation of the whole service with assured pay, increments and prospects, is bound to add greatly to their sense of self-respect. In so far as the existence of this Guild serves to promote these ends, by its organised efforts, it is of immense potential value to the teacher, and I think the profession will gain in importance and dignity if the Teachers' Guild comes to play an important part in the public life of the community.

National efficiency, in the last resort, is bound up with national education, and the efficiency of education depends upon the efficiency of teachers. I cannot escape the belief that we are somehow not doing our best for the country. In the case of many of us, I think I can say with certainty that inefficiency is due to a wrong outlook on life, to faulty organisation of the social structure, to bad food, indifferent company, and evil surroundings and not least, the effects of an enervating climate. When I said earlier that a more complete Westernisation is necessary, I meant that we should cease to believe in some of the soul-killing superstitions that we believe in such as the inferiority of woman, the futility of striving against fate and similar beliefs, which hold in captivity the free souls of men. In the case of some, it is a question of a struggle for ascendancy between the conservative forces at home and the more liberal influences from outside. Many have not the courage to fight and to win; they give in and become slaves with 75% (seventy-five per cent.) of their efficiency thus reduced. So long as age-long traditions and crusty old customs continue to hold sway over men and women, it would be difficult to expect from them reasonable standards of efficiency.

In regard to politics and political influences, I counsel extreme caution. Every true patriot knows and feels that the Indian National Congress is really demanding the impossible. It seems to have hastily conceived a visionary ideal, decided promptly to work for its fulfilment without having assessed either the ways and means or the final cost. The effects of its baneful actions are already being felt, and I am afraid, will be felt more acutely in schools if the movement is not speedily called off. Whatever may be the differences of opinion between one man and another, all must agree that it is wrong and cruel to take away children from schools and to deprive them, for life, of the blessings of culture and refinement.

Whether we want it or not, this country has begun its march on the road to self-government and is already nearing the destined goal of democracy, as far as the Provinces go. That schools and colleges have a great part to play in ushering in this new era is a point I would beseech everyone of you to remember, for it is in the cosmopolitan atmosphere of the school-room and of the play-ground that the foundations of manhood and of nationhood can best be laid.

I have tried so far, to speak about the need for our trying to check the movement for Civil Disobedience and for restoring sanity of outlook everywhere. I have spoken of the close connection that seems to me to exist between Democracy and Westernism as the words are now understood, the need for a constant examination of the educational structure of the country with a view to effecting improvements from time to time. I have shown how the limit of expansion has been reached and how we have to think now more seriously of consolidating and improving the existing structure than of making numerical additions to it. I have shown how our system of education is the cheapest in the world and what we might do with the extra fees if the parents would consent to be taxed more. I have stressed the need for a more rigorous demarcation of the Elementary, Secondary and Collegiate grades of education with a view to eliminating and providing clear jumping-off stages for pupils with different aims and expectations in life. I have suggested State initiative and responsibility as a remedy for slackening and deterioration. I have shown the connection that exists between the efficiency of teachers and the efficiency of the nation and made an appeal for destroying class and caste barriers in the country by making a beginning in the class-room.

No patriot can be so terribly partriotic as to think that this country of ours contains within it everything that is good. I have always believed that knowledge is the heritage of humanity and that we need not be either ashamed to confess the European origin of some of the best things we have come to know, or deterred from borrowing without limit from the best external sources.

The unfortunate trend of our ancient history may have, on account of its insistence on castes and the practice of endless religious ritual, vitiated the very sources of our being, but it is now open to us, in the light of our present day experiences to strive to set right those errors in order to assist in a harmonious development of our mental, physical and moral natures. Westernism does not consist in using Parisian scents and toilet lotions; it is an attitude of mind which encourages the

spirit of inquiry into everything, which eggs human beings on to endless effort in perfection of society and self.

The movement in favour of Westernism has suffered a great set-back on account of the teachings of nationalists during the last two decades. Nationalism in the sense of a revival of ancient ideas on all aspects of life, is admittedly inadequate to supply the many-sided needs of the modern Indian or the modern Oriental, as is seen from the very effective way in which Japan and Turkey have, before our very eyes, Westernised themselves by an effort of will, remaining at the same time as national in their outlook as any nation could be. My reason for dwelling on this aspect of the question is that I have come to feel in the course of my experience of educational institutions, that most people are inclined now to regard the present system as foreign to the genius and temperament of the Indian peoples and seem to me to be taking to it more for economic gain or other advantage than from a desire to purify the spirit through an intensive form of mind and body training. To such people the ancient method of teaching without appliances and apparatus, in the open air as far as possible, appeals strongly, and the dual desk and the laboratory and the library seem to them all unnecessary burdens. I quite agree that as far as the Elementary School is concerned, open air schools with the minimum of equipment are better suited to Indian conditions. But I can never believe it possible to impart a High School and College education according to the older Indian method.

That the modern method of approach to the whole question of acquisition of knowledge is, beyond doubt, the better method I think I need not take time to explain. Knowledge was resident in the mind of the teacher, according to the old method, and the pupil had to imbibe it direct. The Guru taught without the aid of book, chart or appliance, as a rule, and only utter receptivity and absolute docility was demanded from the pupil. Hardly any argument seems to be necessary to show which is a better method, the old or the new, because the new is admittedly more in consonance with reality. According to the new method, knowledge is the individual's interpretation of experience, and as experience varies according to circumstance, knowledge has to be deduced from various experiences in the same way as perfume is extracted from flowers. The Indian teacher seems to me not yet to have made up his mind finally which of the two is the better method, for, in the writings of some, otherwise eminent persons, one notices this call to hark back to the old system. The new method, it seems to me, has not yet found a foothold in the country and is liable at any time to be scrapped, if the pressure of outside compulsion is withdrawn. It is time, teaching bodies definitely made up their mind on this issue. Lord Macaulay was certainly right in thinking that the arts and the sciences particularly, should be learned more from the pragmatic Occidental point of view than from the contemplative Oriental one.

The Indian teacher everywhere regards his pupil as a receptacle into which to pump his ideas. We have all been in our day subjected to this victimisation and we know the terrible consequences of it. From the time the teacher enters his class, till he leaves it, he keeps up a running fire of incessant one-sided talk during which the pupil, as a rule, either goes to sleep or sits up with pencil to paper, taking down vast quantities of information. Few teachers vary this mode of teaching with questioning and rarely does it occur to them to send the pupils to the original sources. Critics have been complaining rightly that this procedure kills initiative and destroys self-respect and that view seems to be right, when we see, that generation after generation of students lapses into mechanical drudgery and indolent resignation directly the formal educational course is over. If instead of dumping their goods on their helpless pupils, teachers would make use of the unbounded power of the natural curiosity of youth, to permanently awaken in their hearts live interests in art and science, the gain to national and social life in the shape of productive literature is bound to be considerable.

It is the opinion of disinterested outsiders that the Indian student all through his youth is a sweet-natured capable person. It is the verdict of those who are in contact with educational institutions that the teacher is, as a rule, inclined to take his profession easy. Ours is a profession in which strict regimentation or centralised control is not desirable. On the contrary the profession best thrives when each member is left to himself to do his work. Although past and present experience tells a different tale, it seems to me better to leave the whole question of efficiency to the honour of teachers than to devise pettyfogging methods of worrying them with punishments. Here I refer more particularly to the Elementary School teacher who is inclined to become thoroughly useless if supervision is, in the least, relaxed. It is sometimes said that inefficiency might be due to chronic poverty. This explanation does not seem to me to wholly explain the trouble. The causes seem to me to lie far beyond, in the faulty social habits of the community. It would be of interest to know, in this connection, that the range of salaries paid to teachers in Japan is more restricted than it is in India.

I wish to say a word about the position of the Government Educational Services, particularly in the Inspectorate, in relation to the entire educational machinery in the country. It is not true to say, as some have said, that the officers of Government do not bring to bear enough sympathy with their fellowmen engaged in the same field of work, or that they demand impossible conditions. Most officers, I feel sure, are actuated by a desire to be of the greatest assistance, and as far as I am concerned, I may say I look upon myself as a very humble servant of the entire teaching profession, in the same way as I consider the entire teaching profession to be a servant of the community. We have the same ideals at heart, which are to spread knowledge wide, in order to promote the happiness of the people.

It is to-day the desire of every well-wisher of the country to see schools develop along new lines. The hope is that the village school will come to play a larger part in the life of the rural community, that the teachers will take more interest in the life of the ryot and the unlearned villager, and try to take the torch of education to illumine the darkness of his home. For this purpose, it is necessary that every High School should have a well-conducted Adult education class, a small poor relief fund, a number of Scout troops, and junior Red Cross leagues, parents' associations, junior social reform leagues. If teachers interest themselves in these activities, they will succeed in dispelling the

instinctive distrust which the ignorant ryot now has of the enducated classes. They would thus be doing far more real and tangible work for the uplift of the rural population than politicians can ever hope to do. I say this because teachers have the advantage of settled life and leisure which are necessary for this kind of work.

I have tried in the course of this speech to put before the Conference a few important points which struck me as deserving of mention. The field we have to survey is large and clearly not possible to traverse fully in the course of a speech. There are bound to be important matters which have escaped my attention. These I hope will be brought up for discussion as we proceed.

This is the second year of the League's existence. I am glad to say it has already established itself in Malabar, and I trust that under the able Secretaryship of my friend, Mr. Parameswaran, who is an invaluable asset to the teaching profession, it will soon be a real source of strength and inspiration to the thousands who are engaged in the noble work of teaching in this district.

SKANDAGUPTA KRAMĀDITYA
(455—467 A. D.)

By Prof. V. RANGACHARYA, M.A.,
Presidency College, Madras.

KUMĀRAGUPTA'S son and successor, Skandagupta Kramāditya, seems to have had a comparatively short reign of 12 years; for, we know that the latest date in his coins is G. E. 148 (A. D. 467), just twelve years after the latest coins of Kumāragupta I. The terminal date, 467 A. D., attributed to Skandagupta, is at variance with the date assigned by earlier writers. Vincent Smith, for example, carried it to A.D. 480; but it is now acknowledged that some of the events ascribed to Skandagupta's reign by earlier writers really belonged to his successors. As Skandagupta's father had ruled for about 40 years, we have to presume that Skandagupta must have passed the middle age when he came to the throne.

The materials for the reign of Skandagupta can be divided, as usual, into the epigraphical and the numismatic. Perhaps the earliest of his inscriptions is that generally known as the Bhitarī Stone Pillar Inscription.* It has been so-called because it is engraved on a sandstone column in the village of Bhitarī in Ghazipur District, a few miles to the east of Benares. The graceful column was once surmounted by the statue of Vishṇu as Śārṅgin. The statue is gone, but the column remains. The inscription records the genealogy of the Gupta dynasty, describes the exploits of Skandagupta in a graphic manner, and concludes with the statement that Skandagupta erected the *Jayastambha* in commemoration of his victories over the Huns and others and installed an image of Śārṅgin thereon, besides allotting the village of Bhitarī for the maintenance of the offerings to the image. The record is not dated; but from the fact stated therein, that the endowment was for the religious merit of his father, we have to infer that Skandagupta engraved it some time after Kumāragupta's death.

The historical facts to which the inscription refers are obvious. It has been already mentioned that Skandagupta came to the throne after the Pushyamitra crisis. Evidently his accession was, almost immediately, followed by a fresh danger in the form of the invasions of the Huns from the north-west. These terrible people had their homes in the Eurasian steppes. One section of them under Attila conquered East and Central Europe about 375 A.D. and harassed the Roman Empire for a century till they received destruction in the hands of the Teutonic tribes in the latter half of the 5th century. Another section, generally known as the Hoa, Hoatan, the Yethas, the Haytal, and White Huns, conquered Persia*

* This is a very important record, discovered in 1834 and edited by a number of scholars, the best being Dr. Fleet's in his 'Gupta Inscriptions' (p. 52 ff). It can be read completely as it is almost intact. It is in Sanskrit script of the northern type similar to the Madhura Inscription of Chandragupta II, though with a more square cut.

* See Sykes' 'History of Persia,' Vol. I, pp. 468-9. According to the Persian chronicles, the Huns crossed the Oxus in 425 A.D. They further state that Bahram, the Persian king, (d. 440 A.D.) undertook an expedition to India, "where the Indian king, in return for his services against the common enemy is believed to have presented to him the provinces of Sind and Makran." Sykes does not believe this to be historical, but notes that it was not entirely baseless and that at any rate it gave the occasion for Bahram to introduce 12,000 Indian gypsies into Persia to provide music and dancing for his people, showing, thus, close intercourse between the two countries. If this were the case, the Huns must have made their entry into South Indus valley before 440 A.D. It is however doubtful. In any case Bahram's successors Yezdigird II (440-457) and Firuz (459-483) had to fight with the Huns. The latter sovereign died in battle with Khush Newaz, the king of

about 430, and then invaded the little Kushān kingdoms of Gāndhāra and Kubhā and vanquished them. These Kushān States had overshadowed Kashmir and the Punjab and might have given trouble to the Gupta Empire, but for their own destruction in the hands of the Huns. About 455, apparently, the Huns passed on further into the interior of Hindusthan. Skandagupta who had just come to the throne was, we may presume, not unequal to meeting them. He had already won fame as the victor against the Pushyamitras and other enemies and, to the gratification of his mother, restored the fortunes of the line. Mature in years and experienced in warfare, he now promptly marched against the Huns. As the inscription says, he joined battle with them like a whirlpool and had his power felt by them. He saved the Empire for the time being; and he spread his name far and wide, as the most eminent hero in the Gupta lineage, as a practiser and supporter of good behaviour, and as one who possessed a spotless soul, a love for music and a supreme skill in policy and war. His greatness was sung by everybody, even children! His might in the battlefield was only equalled by his mercy to the beaten; and poets honoured his virtues with their panegyrics.

The uncommon talent of Skandagupta to acquire the esteem of his contemporaries is reflected in another inscription* which is dated in 461 A.D. This record, which is generally known as the Kahaum Stone Pillar Inscription, indicates at once the emperor's might and tolerance. It records the erection of a column with the images of five Tīrthaṅkaras by a certain Madra, the son of Rudraśarma, grandson of Bhaṭṭiśōma and greatgrandson of Sōmila, in the village of Kahaum (Kakubhagrāma), Gorakpur District, United Provinces, in G. E. 141 (A. D. 460-1) Jyēshṭha. The record refers to the tranquil rule of Skandagupta and his audience-hall being shaken by the breeze caused by the prostration of a hundred kings. It says that the Kakubha village was occupied by holy men, amongst whom the family of Madra lived. Madra's father, we are told, had the appellation of vyāghra (tiger), apparently from his being a tiger to opponent scholars. Madra himself, we are told, had a special affection for Brahmans and ascetics. Alarmed at the changing character of the world and desirous of final beatitude as well as the welfare of all beings, he made these excellent images of the five Arhats (Ādinātha, Śāntinātha, Nēminātha, Pārśvanātha and Mahāvīra) as well as the beautiful stone-pillar, resembling the summit of a mountain and reminding people of the soaring fame of its author. This epigraph is of peculiar interest in associating a lover of Brahmans with the foundation of a Jaina endowment. It reminds us of the close intimacy which, according to Fa Hian, existed amongst the Brahmans and the Buddhists at Pāṭaliputra. It shows that, under the rule of the orthodox Guptas, the spirit of religious bigotry was completely extinct.

Another record* which gives a clue to the pious activity of the noblemen of the reign is the 'Bihar Stone Pillar Inscription.' It is engraved in a pillar, now part of a building at Bihar, the sub-division head-quarters in Patna District. It shows that Skandagupta was also a devotee of Mahāsēna. It refers to the grant of a village named Skandaguptabaṭa and to the construction of a Yūpastambha by a minister and brother-in-

the White Huns. The peril of the Huns to Persia stopped between 503 and 513. Throughout this period India was on the same boat; for failure of Persia to check the Huns meant danger to India.

* The record has been noticed by several scholars. See Fleet's 'Gupta Inscriptions,' p. 65 ff. The pillar with the Jain figures exists, but the pinnacle is lost. It consists of four Sragdhara verses.

* See 'Gupta Inscriptions,' p. 47 ff. The record is much damaged

law of his father. It is interesting for the administrative officers it mentions,—the Uparika, the Kumārāmātya, the Agrahārika, the Śaulkika, the Gaulmika, etc.

A copper-plate charter* of G. E. 146 (A. D. 465) throws light on the sun-cult of the age. While Vishayapati Sarvanāga was ruling over the Antarvēdi (the Duab) as Skandagupta's representative, a Brahman named Dēvā-Vishṇu endowed a lamp for the sun at Indrapura (Indore) in G. E. 146, Phalguna. The introduction panegyrises the worship of the sun as the means to secure immunity from bodily disease and mental agitation. The Brahmanical donor belonged to the Rāṇāyanīya Śākhā and Vārshagaṇa-gōtra. He was a Chatur-vēdin and Agnihōtrin. The temple itself was constructed by a Kshatriya named Achalavarman and a merchant of Indore named Bhrūkaṇṭhasimha. The gift was placed in charge of the head of the local gild of oilmen; and it was decreed that even if the gild moved elsewhere, it was to contribute two *palas* of oil to the temple till the sun and moon would endure. The record is very interesting as the co-operative endowment of a Brahman, a Kshatriya, a Vaiśya and a gild: and seems to indicate the harmony among the different religionists during the benevolent rule of Skandagupta. The reference to the settlement and movement of the gild is also interesting in shedding light on an important aspect of economic life.

The firm hold which Skandagupta had over the most distant parts of his Empire is shown by the Girnar † Inscription of A. D. 465. The inscription says that Skandagupta utilised the services of his Garuḍa-like vassals in the reduction of serpent-like enemies. It says that, after his father's death, he extended his power to the four oceans; that his fame was sung by Mlēchchhas and enemies; that there was no man in his dominions who was irreligious, distressed, poor, wretched, avaricious or otherwise reprehensible. It goes on to say that Skandagupta reflected as to who among his feudatories was fit, by intellect, character and capacity, to rule over the Surāshṭras, and decided to give the honour to a chief named Parṇadatta The inscription describes the virtues of Parṇadatta in glowing colours which indicate what was the ideal of a king or feudatory in those days. It then goes on to say that Parṇadatta appointed his son Chakrapālita, who is described in equally panegyrical terms, as the protector of the district and city of Girnar. Chakrapālita possessed not only all the kingly virtues, but was very dear to the citizens on account of his justice, his free movement among them and his solicitude for their happy private life. The inscription then goes on to say that in G. E. 136, the rainy season saw such tremendous showers that the lake Sudarśana broke its embankment and the whole country became flooded. Chakrapālita had the embankment rebuilt. The language of the epigraph is fit to be quoted. Then, in course of time, it says, the winter season came with its clouds and broke asunder the season of summer. For a long time there was unceasing downpour. The Sudarśana accordingly suddenly burst in 136 of the Gupta era, on the night of Praushṭhapada 6. The rivers rising in the Raivataka (near Girnar) and the beautiful and sandy Palāśini became the real, instead of being the theoretical, mistresses of the ocean. Long kept in captivity, they went back, in accordance with scriptural injunction, to their lord (the sea). The mountain

* *Ibid*, p. 68 ff.

† Dr. Fleet has edited it in 'Gupta Inscriptions,' p. 56 ff, under the title of *Junagadh Rock Inscription*. It was discovered in 1838 and studied by several scholars before Fleet. It is on a rock together with the 14 Edicts of Aśōka and the famous inscription of Rudradāman. It is in the Kathiawar script of the 5th century. It is in Sanskrit verse and slightly damaged and incomplete.

queen Ananta Dēvi. Now we know from the numismatic finds that this Puragupta was succeeded by his son Narasimhagupta and that this Narasimhagupta ruled only till 473 as his successor Kumāragupta II was on the throne in that year. From 467 to 473, therefore, there were two rulers, namely, Puragupta and Narasimhagupta, whose total regnal duration was six years. We do not know how many of these six years have to be attributed to Puragupta and how many to Narasimhagupta. One thing is certain, namely, that Puragupta could not have ruled for more than two or three years at the most. Mr. R. D. Bannerji observes that Puragupta probably set himself up as a rival in the latter part of the reign of Skandagupta himself. We do not find, he points out, Puragupta's gold coins in the distant provinces of Malwa or Saurāshṭra. They are found only in the heart of Magadha. From this he surmises that Puragupta probably rebelled in the home province of Magadha during Skandagupta's absence from the capital in the Hūṇa war. He believes that this theory receives support from the absence of Skandagupta's name in the Bhitarī seal of Kumāragupta II—an omission which can be explained only on the ground that the brothers were not well disposed towards each other.

His Immediate Successors.

We may thus conclude that (1) Skandagupta died in 467; (2) that during the last two or three years of his reign he had probably the rivalry of Puragupta; (3) that Puragupta died almost immediately after, as we know from coins that his son and successor Narasimhagupta ruled only till 473; and (4) that Narasimhagupta was succeeded in that year by his son Kumāragupta II. Mr. R. D. Bannerji surmises that, as Skandagupta was already approaching middle age when he came to the throne in 455, and as his brother Puragupta must have died a comparatively young man (for according to this scholar, his reign coincided with the last few years of Skandagupta), "Narasimhagupta must have been a mere youth when he succeeded either his uncle or his father... and could not have reigned for more than six years. Consequently it is quite evident that Kumāragupta II was either a baby in arms or an infant when he came to the throne." As we know that Kumāragupta II also was on the throne for three or four years only, it is clear that he too died young.

With the death of Skandagupta about 467 and the advent of a period of short-lived and rapid succession of rulers, the decline of the Gupta Empire set in. We shall study in the next chapter the processes of this decline and fall.

"THE HOPE OF HUMANITY LIES IN THE CHILD."

By Mr. E. A. Rajagopalacharlu, B.A., L.T.,
Headmaster, State Middle School, Gadwal (Raichur Dt.).

IT is a happy augury for the future that with the multiple progress and expansion of the age, the little human creature, hitherto a neglected organism, is claiming the attention of the educational world, in a remarkable degree, not even anticipated. The child in the past literatures of the world, though often present, did not arrest the attention of the great masters of literary production as a proper and serious subject for reflection, interpretation and illumination. It is true that some of the sublimest passages in all literature have either been put in the mouths of children or addressed to the human race through them, to show that the child is not left unconsidered altogether. But these masters seem to have conceived the child as a novel little being come into the world recently, as an young, untutored creature, knowing little of life and its problems which form the basis of all literature. Thus lacking in human experience, the child was left unregarded as a subject of serious study and contemplation, but rather he is represented as an instrument for proclaiming certain great and fundamental truths from the earliest literature to our own days. The Semetic races used the child very often in this way. So did the early literature of Egypt and Greece. In Roman literature likewise, the child is present for moral purposes as a didactic instrument to expound certain truths. But in all these cases, it was doubted how far the instrument utilised for moral purpose was related to the truth, he was thus made to proclaim or the spirit which he was thus made to illustrate. It did not seem to occur to the master minds of ages gone-by that the child also has a personality of its own, with all primordial passions of the race coursing along and seeking outlet in expression. Of course, Wordsworth when he says, that the child contains in itself the germ of human life in his Epigram: 'The child is father of the man,' seems to have apprehended that the child by the terms of his own existence is a conscious effective power in a human situation, but the poet perverted it to the uses of a form of philosophical speculation. At any rate, since the time of Wordsworth, the child is being recognised as a distinct individual element in human life. It is no longer a mere undeveloped man but is a life of its own and is worthy of being represented in literature as such.

Robert Louis Stevenson has often in his writings shown a keen sympathy for children and a keen insight into their lives. Charles Dickens also has given a leading roll to children in his novels. His children are old types of his existing evils or types of his ideals. Paul Dombey was sketched to overthrow the cram system and to show the need of physical training, and an ideal type of modern school has been evolved from Dr. Strong's School of David Copperfield. Longfellow is called the children's poet, not only for his simplicity but for his frequent mixing among them in the few poems about the children. Thus we see the child gradually coming into his literary inheritance in the modern world. Thus in brief is the contribution of literature towards childhood.

In recent years the investigation of children on a scientific basis has been pursued with such energy and industry that child-study may now be regarded as a world-wide movement. The foremost society in the United Kingdom for the welfare of children is the

British Child-Study Association with branches in all the great cities. Another society called the Parents' National Educational Union is also in full sympathy with child-study movement and has adopted principles which presuppose child-study. On the continent of Europe also there is much interest and enthusiasm evinced for child-study in several University centres, where laboratory methods of investigation are largely employed for studying both the physical and mental sides of child-life. France, Germany, Italy, Belgium have all their child-study literature.

In America too, the study of children is carried on very actively. Professor Stanley-Hall, as the recognised leader of the movement, has published many books on the subject and has done more than others in the field to promote investigation of child-nature. This serious attention for child-study in recent years is accounted for the greater emphasis of educators upon knowing the differences between children and adults, and secondly for the influence of the evolutionary theory calling attention to the transition from the lower to the higher forms, and lastly for the increased interest in man and new methods of studying him, especially on mental side. Accordingly, in these years, any page from popular magazines will reveal interesting stories about children, while about 40 years ago, such accounts were mere phantoms of delight. Every progressive institution of modern times is deemed far below the ideal, if it does not include a course of child-study among its courses. Physiologists and Psychologists of the civilised East and West spare no pains to dive deep into their respective sciences to get at complete knowledge regarding the oft-neglected human child. In all educational administrations and sociology, we see greater attention paid to this problem of child-study in no less degree, and consequently we hear and make much of child-labour—compulsory education, truancy, delinquency, play-grounds, defects, deficiencies, abnormalities of children, juvenile courts, health movements, etc.—all these enterprises of the world cannot fail of impressing any serious reader with the growing importance of child-nature and knowledge and all preconditions that are necessary for the healthful development of humanity in the new world. The old idea that children are to be treated as undeveloped adults is giving place to a new one that children are different from adults in all their physical and mental characteristics. The child's mental interest, the child's ability at different stages, its physical, mental and moral development at each age are engaging the attention of the educators more and more than mere acquisition of knowledge and skill necessary for later adult life.

To study the child on a scientific basis, educators of keen interest employ two methods: In the one called the Individual method, one or more children may be studied intensively through a long period of time and they determine the changes that take place from time to time with the advancing years. In the other called Collective method, a large number of children of different ages may be compared by means of measurements and tests, and the common characteristics of each age are determined statistically. These methods are supplementary to each other, though neither alone is sufficient. The parents are no doubt, at a better advantage than educators, in their observation of children, from their longer hours of association and touch with their trust. But in the majority of cases, this parental observation lacks the definiteness and accuracy of a scientific observer or a specialist's observer, though opportunities in the latter case are fewer than in the former. In the case of strangers, it is a problem of no mean difficulty to get the child used to the new ways of the stranger. Besides these two mentioned, there are employed other tests and experiments in regard to children, all fraught with difficulties due to the variability of child temper and moods. Physical measurement of the chest, to determine its expansion, is not accurately done and so cannot be relied upon. Language of the child in babbling sounds and broken tones is of little help to a correct understanding of nature for the chances for definiteness to know what is wanted are few. It is rather befitting for students of child-study to employ a questionnaire method in such cases where the expression is inexact and inadequate and this must be used with great care, because questions also must be precise and definite without being vague and desultory.

The childhood is conceived to be the life's morning march, hence all the more significance is attached to this than to other stages of human life. The study of the child on right lines gives a clue to deeper human nature than any science. It is the key with which we can open the door of human nature. Milton says 'Childhood shows the man as morning shows the day' to emphasise that the intricacies and complexities of adult life that make men and women great or small can be presaged in earlier years, for here nature is fair to its roots, the mainspring of all disturbances of sanity and virtue is found in these early years. The same sentiment is echoed when Charles Lamb says "Children have a real character and an essential being of themselves." In so far as he is right, it is worth the educator's while to know something of this "real character" and "essential being." The great Rousseau of the 18th century attached so much sanctity to childhood that he recognised it to be the direct outcome from the hands of the Author of Nature and all things degenerate in the hands of man. The child as a product of nature was not to be corrupted by being assimilated to man-made society. Accordingly this educator emphasised that the child is the chief factor in education but not the curriculum by which he had to be influenced. His theories and ideals though somewhat revolutionary at first in his own age were made to fructify by the great school-master Pestalozzi who compared the child to the seed in which the future tree was latent. Everything was within the child and only wanted drawing out. Consequently Pestalozzi held that the fully-developed man was implicit in the child itself and that therefore education was a natural development from within. Froebel, the sole and exclusive heir to this Pestalozzian theory, contended that the natural unfolding of a child's powers was a divine process and therefore cannot go wrong. In the words of Froebel, the child is a fresh bud of progressing humanity and that the object of education was the realisation of the faithful, pure, inviolate, holy life in the child. Froebel conceives: "By education, the divine essence of man should be unfolded, brought out, lifted into consciousness and man himself raised into free conscious obedience to the divine principle that lives in him and to a free representation of this principle in his life." Froebel, like his predecessors, had no respect for book learning. His purpose of instruction was to give scope for the self-activity, self-expression and free development of the child, all of which he proposed to achieve by song, movement and

construction. The influence of this great man is seen in the present day education called the Kindergarten System, where plenty of scope is given for children for motor expression, in play, in clay-modelling, drawing and manual training. The literal meaning of Kindergarten is children's garden. In this garden, children are looked upon as human flowers and plants allowed to act naturally as flowers do, but not looked upon as little machines. The teacher must consider the natural desires of the child before attempting to teach him, as the gardener prepares the ground before sowing. The child must as far as possible be given things to manipulate as it desires. It must be helped to do things in an orderly and systematic way, what if left to itself it would do in a casual haphazard way.

Though the early educators such as the Christian theologians had neglected the child as having no place in the order of human life, calling itself a mere glutton with envious rage at the breast of the mother, though the master minds of early literatures had but touched it lightly, the trend of modern civilisation is striking a new path in its conceptions and ideals of childhood, in a way consistent with the progress made in all departments of human knowledge, for it has discovered after the age-long evolution that the hope of humanity lies in childhood and consequently the child is coming into its own day by day, and it is hoped that all lovers of education will see to its importance and model their instruction to suit the needs, desires, interests and inclinations of this growing little human being.

THE ENGLISH IN THE MADRAS PRESIDENCY.

By Mr. T. Krishnamurti, B.A., B.Ed.,
Teacher, Board High School, Chodavaram.

CAPTAIN HIPPON of the ship *Globe* landed in 1611, and founded factories at Nizampatam and Masulipatam. In 1616, settlements were planted at Cranganur and Calicut on the West Coast. In 1619, another settlement was effected at Pulicat, but owing to Dutch jealousies, it was abandoned. In 1625, the Company's agents at Bantam in Java despatched a vessel to Armagon in the present Nellore District, and set up a small trading establishment there.

In 1639, Francis Day, the chief official of Armagon, obtained the grant of the land on which Fort St. George now stands from the Raja of Chandragiri. A small fort was at once erected, and in 1641 the place became the Company's head-quarters on the Coromandel Coast. In 1653, Fort St. George was raised to the rank of a Presidency, and in 1658 the factories in Bengal were placed under its orders.

In 1690, the Company purchased from the Marathas the land on which Fort St. David now stands. At the end of the century, there were also English factories at Porto Novo, Madapollam, Vizagapatam, Anjango, Tellicherry and Calicut.

Upto 1740, the Company's agents had managed to keep themselves clear of the wars between the native governments, and free from serious trouble with the other Europeans in the south. But in 1741, the War of the Austrian Succession lit the flame of conflict between them and the French. In 1746, Madras was captured by La Bourdonnais. Fort St. David became for the time the Company's head-quarters in the south. Madras was restored to the English under the Treaty of Aix-la-Chapelle in 1749. The Company set themselves vigorously to work to render it more defensible.

Though peace was declared between the two nations, their forces in the south engaged on opposite sides in the struggles between the native powers. Each espoused the cause of a different claimant for the Nawabship of the Carnatic, and each supported its own candidate for the office of the Nizam of the Deccan. The details of the conflicts concern themselves with the exploits of Clive whose name will ever be famous.

In 1757, war broke out between the English and the French in Europe, and the forces of the two nations in the south were once more at each other's throats. The French captured Vizagapatam, Fort St. David, and in 1758 they besieged Madras. Here they were unsuccessful, and eventually withdrew. Meanwhile, Col. Ford defeated them at Condore, and captured Masulipatam. The victory resulted in the grant of the Northern Circars to the Company. Further south, Sir Eyre Coote routed the French at Wandiwash. Gingee, Arcot, and other French settlements fell in quick succession. In 1761, Pondicherry surrendered, and in 1763, by the Peace of Paris, it was restored to the French. The power of the French in South India was never again formidable. It was thus in the Madras Presidency that the question was decided which of the European nations should be supreme in India.

In the middle of the 18th century, the powers to be reckoned were the Nizam, Haidar Ali of Mysore, and the Marathas. The only European force of any consequence was that of the English. The struggle for the peninsula now lay among these four. The Nizam and the Marathas invited the English to assist them in clipping the wings of Haidar who was encroaching upon their territories. But Haidar bought off both the Nizam and the Marathas, and then made a descent upon the English possessions in the Carnatic. The operations of the fight were indecisive, and peace was eventually concluded in 1769 by a treaty based on a mutual restitution of conquests.

In 1780, the second war broke out with Haidar, and he descended upon the plains of the Carnatic burning crops and devastating villages, and a cordon of blackened desert was formed all round the town of Madras. Sir Eyre Coote was despatched to Madras with reinforcements. His ability soon caused the tide of fortune to return. But age sapped his old energy, and after three years of fighting, peace was at length made in 1784. As before, the basis of the treaty was a mutual restoration of conquests.

Six years later, war once more ensued with Mysore, Tippu having raided Travancore which was in alliance with the British. Lord Cornwallis commanded the forces in the field in person, and the Nizam and the Marathas assisted the English. Seringapatam was besieged, and in 1792, Tippu agreed to cede to the allies one half of his territories, and to pay an indemnity of three crores and fifty lakhs of rupees. The British share of the territory included the country round Dindigul and the districts of Salem and Malabar.

Tippu then began to intrigue to draw to his own side the allies of the British, and invoked the aid of the French. Lord Mornington realised the danger to British supremacy in India, and came south to deal

with the situation. The Nizam and the Marathas again joined the English, and Tippu, after a feeble resistance, retired to Seringapatam. The fortress was stormed in 1799, and Tippu's body was among the slain. A representative of the old Hindu dynasty was placed upon the throne of Mysore proper, and the rest of Tippu's territories was divided among the allies. The share of the British included Canara, Coimbatore, and Wynaad.

In the same year 1799, the Maratha Raja of the Principality of Tanjore in return for aid received in gaining the throne, executed a treaty resigning the administration of his kingdom to the Company in consideration of an annual payment. In 1800, the Nizam ceded to the Company all the territories he had acquired from Mysore, and these include the present districts of Bellary, Anantapur, Cuddapah, and part of Kurnool.

When Seringapatam fell in 1799, treasonable correspondence had been discovered between Tippu and the Nawab of the Carnatic. In consequence, a treaty was concluded with the Nawab in 1801, under which he resigned the government of his country to the Company, but retained the titular dignity and received a considerable stipend. The existing representative of the family bears the title of Prince of Arcot, and has the position of the first native nobleman of Madras. In 1839 internal mismanagement and treasonable intrigue on the part of the Nawab of Kurnool led to the annexation of his country. Tranquebar was purchased from the Danes in 1845. In 1862, the district of North Canara was transferred to Bombay. The Company had thus obtained the whole of the present Madras Presidency. The territories thus rapidly acquired at the end of 18th and beginning of 19th century were reduced to order with little trouble.

Northern Circars.—Ganjam, Vizagapatam, East Godavari, West Godavari, Kistna, and Guntur are known as the Northern Circars. Prior to 1859 these consisted of five districts, but in 1860, the three districts of Rajahmundry, Masulipatam, and Guntur were divided to form the Godavari and Kistna districts. The latter have again been split up into Godavari, Kistna, and Guntur. Ongole taluk of the Nellore district was added to the Guntur district. Later, Kistna was split into Kistna and West Godavari districts, and the former Godavari district has been called the East Godavari District. The northern districts were formerly under the Nizam's Government. They came finally into British possession in the year 1823. Prior to 1855, these were under the charge of a separate Commissioner, but each district had its own revenue and judicial establishments. The appointment of the Commissioner was abolished in 1856.

The Carnatic.—Northern Carnatic extends from the river Pennar to the river Gundlegama, and consists of a portion of the Nellore district. Central Carnatic extends from the Coleroon to the Pennar river, and contains a portion of Trichinopoly, Chingleput, North Arcot, South Arcot, Madras, and Nellore districts. Southern Carnatic consists of a portion of Trichinopoly, the whole of Tanjore, Tinnevelly, and Madura districts. These came into the possession of the British between the years 1799 and 1801. The Chingleput district was obtained from the Nawab of Arcot in 1763 in return for services rendered to him and his father by the Company.

Ceded Districts.—Bellary and Cuddapah were ceded to the English by the Nizam in 1800. In 1839, Kurnool was placed under British administration.

Salem and Coimbatore.—The former came into British possession in 1792, and the latter in 1799.

The Nilgiri Hills.—They were formerly a taluk of the Coimbatore district. They formed a separate district in 1868.

Malabar and Canara.—These two on the West Coast fell into the possession of the British in 1792 and 1799. Canara was divided into North Canara and South Canara in 1859, and in 1862 North Canara was transferred to the Bombay Presidency. The taluk of Coondapur which formerly belonged to North Canara is now attached to South Canara.

There are five Native States, Sandur, Banganapalle, Pudukkottai, Cochin and Travancore. The British Political officers advise these States in important matters.

THE PLACE AND TEACHING OF DRAWING IN MANUAL TRAINING 'WOOD-WORK.'

By Mr. A. RAMAKRISHNASASTRI,
Manual Training Instructor,
Govt. Training School, Parvatipuram.

DRAWING AS A FACTOR IN MANUAL TRAINING.

DRAWING is a form of written language in which lines take the place of letters and words. It is the clearest and the shortest of all languages. A few lines hastily thrown together will often give a clearer idea of what we want than any amount of verbal or written description. It is the language of trades and industries and has a precision that language of words cannot attain.

Drawing is a means of education and a powerful agent in stimulating all those faculties that conduce to complete living. It is an enjoyable, stimulating, educational process and a real training of hand and eye. Manual work is the natural complement of drawing. Each subject assists the other, if indeed they can be looked upon as two distinct subjects.

Drawing forms a basis of all manual training. Working drawing saves time and material. It leads straight to the mark and work becomes more the product of reason than the result of the rule of thumb. Drawing in itself is a kind of manual training; but it has been well observed that manual training through drawing alone is but work half done. Designing and the working out of the design are but two parts of one whole, but without drawing exact and intelligent hand-work is scarcely possible. Drawing is the handmaid of all industrial arts, as such, it is of the utmost importance that it should be cultivated to the fullest extent. In addition to this utilitarian value, drawing has a distinct educational value in aiding the formation of mental and moral discipline of a child. It trains accurate observation, which is one of the most valuable and most complex of mental processes. It quickens the power of perception and gives scope to the inventive faculties better perhaps than any other subject. It materially assists us in the special kind of training which we have in view. It cultivates the habits of close attention. The hands acquire dexterity. It develops habits of order, neatness, patience and perseverance, and trains the sense of form and proportion. It also provides scope for the imagination and greater opportunity for the exercise of inventive powers. The stimulation of imagination and the spirit of enquiry can be well-cultivated in the class by the teacher which will aid to a great extent in attaining success later on in the special kind of work he takes up. It is a universal language understood the wide world over. Among real educational forms of hand-work, drawing must take rank as the most important, because all other manual exercises may be said to be dependent upon it. It is a valuable means of education, both from a utilitarian and an intellectual point of view.

DRAWING WITH INSTRUMENTS.

Drawing, the handmaid of the arts, is an essential part of every manual training course. The type of drawing chiefly used is that known as mechanical drawing. It is done by means of the following instruments: foot-rule, T-square, set-squares, compasses, dividers and the drawing-board. Drawing lessons should be begun by a careful explanation of the drawing instruments, after which the teacher should proceed to demonstrate to the class how to hold and use them. This

demonstration is best done not on the black-board but on a sheet of drawing-paper pinned to a drawing-board similar to that used by the pupils. Preliminary exercises in drawing horizontal, vertical and inclined lines by means of the T and set-squares, should follow the demonstration lesson in order to familiarise the pupils with the use of them. Before proceeding to the actual advanced mechanical drawings, the pupils should be well-equipped with the various uses of respective geometrical instruments in a compass-box, and simple construction in geometry with their help such as drawing lines of a given length correct to fractions of an inch, angles and measurements, construction of perpendiculars and angles with the help of compasses, protractor and set-squares, bisection of straight lines and angles, parallel straight lines, division of a straight line into any number of equal parts, diagonal scale, and geometrical figures, squares, triangles, circles, hexagons, octagons, etc. It will be found that the time devoted to these preliminary exercises will be amply repaid by better and more intelligent work throughout the course.

OBSERVATION LESSONS.

Observation is the absolute basis of all knowledge. The first object then in education must be to lead the child to observe with accuracy, and the second, to express with correctness the result of his observation in words first and then in other materials. Education, in which the training of observation plays a considerable part, will not be open to the objection of being exclusively bookish and by insisting on the use of the pupils' own senses as a pathway to knowledge will lay the foundation for a right direction of their activity and intelligence during their school-life and afterwards. Children should be brought in contact with the object they have to draw first and then make it in wood, and they have to make their own investigations, and to draw their own inferences. They should be told as little as possible and induced to discover as much as possible. They should be allowed to handle and examine the object minutely and note the different parts and their connections to one another. They should first make free-hand dimensioned sketches of it in an ordinary note-book, the sizes being taken from the actual model which is the best or given on the black-board.

PRELIMINARY TO WORKING DRAWINGS.

Before making a model, the teacher should discuss its use and shape with the children and note the facts on the black-board. The measurements of the model should be asked for and then verified by use of a ruler. In the earlier and simple models, of course, there is not much scope for modification, which will help to develop their inventive ability. Occasionally the teacher might suggest the model and its particular use and ask the pupils to design one to meet the requirements. The different efforts should be criticized by the pupils and when satisfactory, the pupils should be encouraged to draft out working drawings and to execute the models to their own dimensions. A good procedure will be to do the model with the help of the free-hand sketches they have drawn during the observation process of the model, and after the object has been completed, a drawing to scale should be made by the pupils taking the sizes from the objects which they have made.

WORKING DRAWINGS.

Before commencing the actual practical work of any model, we first make what is termed a working drawing of it. This working drawing may be merely a free-hand perspec-

tive sketch with the necessary sizes marked on it. To a suitable scale showing the true shapes of the different sides is another drawing. It is this latter method of representing objects which is more important.

In manual training the drawings must be always finished and dimensioned, and the models must then be made to the dimensioned drawings, the pupils having a clear notion of what they have to do. These drawings should be from the simple to the complex and not only should the drawings show what has to be done, but sketches should be introduced in the earlier stages showing how to do it. In the early stages, a simple dimensioned sketch might be employed, that is, the perspective view of an object. This gives a three-dimensioned view of the model and is easily understood. Oblique projection, isometric projection, orthographic projection and sectional drawings could be taken next. The teacher should build up a suitable course of his own on the lines, that it should include a graduated course of full size and scale drawings of plans, elevations and sections of models including drawing to scale from sketches or from actual models and transforming from orthographic into isometric and *vice versa*. They have to make free-hand drawings in perspective of transverse and longitudinal sections of wood, transverse sections of the trunk of a tree, converting of woods, shrinkages, grains, etc., and also some sketches of simple tools and their component parts and the positions for handling the tools during the various operations which would assist the pupils later on in the study of various timbers, and in the practical wood-work.

METHODS OF PROJECTION.

It is difficult to represent or project on the surface of a flat sheet of paper the true shapes of a solid object, and various methods have been devised to overcome this difficulty.

1. *Perspective.*—A perspective drawing represents the object as seen from one point of view, and the result is a picture such as might be obtained by photography. As a working drawing, the object of which is to furnish the workman with all details of construction, such a view is unsatisfactory.

2. *Conventional Perspective or Oblique View.*—Since it is impossible to take all the measurements on a perspective drawing, a variation from this has been established, which is called conventional perspective, on which measurements can be made. A glance at this drawing will suffice to show that the picture does not present the object as it appears to the eye. It has this advantage however, that the lines are the actual lengths of the edges of the blocks or models, and measurements can be made thereon. This kind of drawing is also termed as the oblique projection of the object.

3. *Isometric Projection.*—This is another way of representing the object. Isometric means equal measures. The isometric projection has somewhat the appearance of a drawing in perspective, but in this drawing, all lines in the three visible planes at right angles to each other retain their exact dimensions, which later on is a great gain. For the representation, therefore, of such objects as have their principal parts in planes at right angles to each other, this kind of projection is particularly well-suited. Hence its use in the representation of various joints and simple rectangular specimens made in the manual training class. Hence this kind of drawing is the most convenient for use in the manual training room.

Before the children can construct conventional isometric projections of the teacher's large models, they must be initiated into the mysteries of scale drawing. There is no difficulty in this, provided the pupils get a clear idea at the outset of what is meant by "drawing to scale." It is the representing of the original on a smaller scale in which all the measurements retain the same ratio to those of the original, that is, if the length of the drawing drawn to scale is $\frac{1}{4}$ of the length in the original, then the breadth and height of it also will be $\frac{1}{4}$ of the breadth and height of the original.

4. *Orthographic Projection or Plan and Elevation.*—A plan of an object is said to be the drawing of the object as seen from above, imagining as if we are above each part of the object. Next the front elevation, or front view as it is also termed, should be drawn in a similar manner with our position in front of the object, and for side-view or elevation, keeping up our position on the side of the object, imagining in each case as if we are opposite to each part of the object, on those sides. These drawings give us all information we require, and by measuring them, we can obtain the length, breadth and thickness or height of the model. By this exercise the pupils will be able to grasp the orthographic projection more thoroughly. It is this drawing that is mostly adopted in the latter courses of representing models in the manual training class-room.

5. *Sectional Drawings.*—Sectional drawings are those which show internal details obtained by supposing the object cut through in various directions by planes.

PRECAUTIONS.

Neatness, spacing and proper finish are the three factors which make up a good drawing.

Neatness.—Hands should be clean. The rubber powder should always be dusted off with a handkerchief and as far as possible never use rubber. Sketches should be very thin and light. All instruments before they are used should be wiped off and care should be taken in the movement of them on the paper. The hand should not rest over the drawing. It is always advantageous to keep a handkerchief under the hand. The surface of the bench or the drawing-board should not be used for pointing the pencil. If the drawings are to be made on a drawing-book, it is always advisable to keep the book open so that the faces of the two pages are up. If folded, the page resting on the bench or drawing-board becomes black and the white page or drawing drawn before on it will be spoiled. The book or paper should be kept and handled with great care, as the edges and corners will be bent and thus present an unhealthy appearance to the eye.

Drawing.—The figure drawn should occupy the central part of the paper and should be boarded if the drawing is made on a separate sheet of paper. As far as possible, the drawing should be big enough to enable us to represent clearly all the minute portions of the object and detect at a glance any mistakes committed during the work.

Finish.—The following points should be remembered by every pupil while finishing his drawing. Lines should be thin, black and uniform in colour and breadth. Sand-paper should be used for pointing pencil. Heavy lines denote the outline, thin lines denote construction and projection lines and chain lines denote hidden edges.

HINTS.

Knowing that it is always advantageous in many a respect to represent a model in draw-

ing, on a sheet of paper pinned to a drawing-board, with the help of T-square and set-squares, the following hints should be borne in mind by every pupil while making such a drawing with the help of the above instruments. Drawing on separate sheets of paper is preferable to drawings in a drawing-book, as much freedom is sustained :—

1. The stock or head of the T-square must always be kept on the left-hand edge of the drawing-board.

2. All horizontal lines are to be drawn with the T-square, and all vertical lines with the set-square, using the upper edge of the T-square, on which to slide the set-square.

3. As far as possible, all lettering and dimensions should be one way up, and dotted lines used to represent a hidden part.

4. Projection lines, dimension lines and construction lines should be thin continuous lines.

5. H. B. pencils are useful only for taking notes. They should never be used for such drawings as these. Harder pencils are necessary for thin drawing in the beginning and the medium size for neat lining. Cheap pencils of poor quality should not be used. The method of sharpening pencils deserves attention. Two kinds of pencil points are generally used in drawing, namely, rounded pencil point and chisel pencil point. A point formed in the manner of a chisel point will last longer, when used for drawing than the rounded pencil point. The latter kind of pencil point can be used for sketching in the beginning and the former for finishing a drawing.

6. Every drawing should be dated, passed and marked by the teacher, and completed drawings should be kept in large brown paper envelopes, which may be made by the pupils in the manual training class.

'KING LEAR.'

By Mr. R. KRISHNAMURTI,
Vellipalayam, Negapatam.

I.

PRELIMINARY.

IN what follows certain preliminary things are supposed. The reader, for instance, is supposed to know the story. He is expected to have a clear knowledge of the play, possibly scene by scene, and it is meet that he should be able to quote important passages from the text. He is further assumed to have a tolerable knowledge of Shakespeare and his art, which is necessary for the proper appreciation of his plays. Moreover, it is taken for granted that he has also an aptitude for further knowledge which may broadly be called aptitude for research.

A scholar proceeds gradually. He first studies the play with a view to understand the main outline of the story. A second reading benefits him to acquire a mastery over the details of the play, scene by scene, act by act. And a third reading he gives so that he may learn by rote certain important passages in the play. He first observes, then he groups, and then he explains the facts of the case and this, I may call, procedure on scientific lines. "And though the scientific mind is slow at arriving at conclusions," yet in almost all cases it is sure. 'Topical' arrangement of a play is a frequent device, generally adopted by young members of the calling, which in most cases avoids the many pitfalls of dramatic criticism. However, the efficacy of this manner of dealing with the subject-matter cannot be denied. The subject is first well-studied, next digested and then arranged under proper heads so as to facilitate the reader's understanding, and this doubtless is a sure and sound method and is recommended to all those who aspire to become critics at some later period of their lives. But, somehow, this form of exposition has been considered dry, methodic and prosaic and the more advanced form of considering facts as they present themselves is much in vogue.

Of the many plays said to have been wrought by the almighty hand of Shakespeare, whether in the province of comedy or tragedy, it is impossible to credit any one particular play with the supreme and crowning honour of being his master-work. And indeed he would be bold above all names of boldness that would prefer any one of the four great tragedies to either of its rivals! "One star differeth from another star in glory." Cordelia may be liked for her adorable filial love; Desdemona, for her simple and unsuspecting nature; and Ophelia for her child-like inexperience. But who would say that the one is superior to the others? I will not. Each is eminently interesting and best fitted to her situation. And where the difference is one of kind and not of degree, one is at a loss to say which surpasses the rest. Were it not for the reality that surrounds the characters, Shakespeare would have found an early grave in the minds of the English reading public.

Reality! Yes. But what about the improbabilities? Dramas in general, and Shakespeare's in particular, contain certain improbable circumstances under which the characters act and which in real life would almost never occur. The main cause of such improbable occurrences seems to be a necessity inasmuch as they are devices to bring about the compassed end. A man of Shylock's calibre is very likely to be met with among the usurious money-lenders of to-day, but how many Shylocks are there who will accept the final judgment of the Duke of Venice and become a convert to another religion. Shakespeare's Shylock stands alone! And indeed how many men's lives turn upon the edge of a straw! Doubts also arise as to what is really meant by the author; for instance, whether Shakespeare really means us to sympathise with the treatment meted out to Shylock, and to Falstaff. The nature of the love between Hamlet and Ophelia is also a hard nut to crack. We cannot exactly explain the tragic end of the course of love between them and arguments, for and against both silly and sane, are advanced to prove the sincerity or otherwise of Hamlet's love to Ophelia. Inasmuch as this is the case, the problem baffles many critics; and actors too. But the critic has a decided advantage over the actor. Where he is in doubt, he may simply say: "After having bestowed much thought on the subject—the pros and cons of the question—I am unable to arrive at any decided opinion or even half-way house." But the actor must show by his looks, action and gesture, his decided inclination to one idea and in some cases he may err and offend popular judgment. How much more safe are we to Kean, Kemble and Mrs. Siddons!

DATE.

The first thing to say in regard to any play of Shakespeare is its date and then the probable source or sources whence he collected the materials for his drama. Though the *Stationer's Register* and Mere's *Palladis Tamia* are two very important documents which give us a fairly correct estimate of the date, yet it is extremely difficult in some cases, as it is easy in some others, to assign the date in any fair degree of accuracy. Here, I humbly refer my readers to Mr. Dowden's *Primer of Shakespeare*, a nice little book con-

taining a mine of information to a student of Shakespeare. As regards 'King Lear' there is not much difficulty.

Malone says: "It is extremely probable that its first appearance was in March or April 1605." Drake assigns it to 1604. However, it could not have been before 1604, as it contains an obvious reference to Harsnet's *Discovery of Egregious Popish Impostures* and this was published only about the end of 1603. Steevens satisfactorily explains that 'King Lear' closely followed its publication. Moreover as this drama was staged before King James I during the Christmas of 1606, it is to be presumed that the play was most probably written in 1605 and completed by the following year. Internal evidence also ascribes the play to the last period of Shakespeare's life. The play is at one with *Macbeth* and *Othello* in its tragic implication.

SOURCE.

I shall now deal in some detail with the source of 'King Lear.' Critics often complain that he never invented a story. True. His genius was not for invention. But what need has he to tax his brain unnecessarily while he can fuse, mend and mingle stories in so very beautiful and artistic a manner as to give quite a new setting to the more familiar form of the stories. And here the greatness that he achieves by welding two almost incompatible stories, is indeed singular, and nowhere else is it better exemplified than in *King Henry IV, Part I.* In this play the dry-as-dust facts of history make a wholesome combination with the Falstaffian comedy by the artistic touches of the author. And then, he makes alterations even in established facts of history in order that he may meet the desired exigencies of situation.

As regards the present play, various sources have been suggested It is said that the story of 'King Lear' is found in the *History of British Kings* by Geoffrey of Monmouth (d. 1154) and here the death of the king is said to have taken place about 800 B.C. And basing on this a story had been woven and published in 1593. Shakespeare in 'King Lear' has increased the horrors of the original story and has heightened the tragic intensity by the death of Lear and Cordelia. This is purely Shakespeare's divining and is not at all warranted by Monmouth's story. Geoffrey says that after the flight of Lear and Kent to France, Cordelia took up his cause and banished the cruel sisters. The next important source is Holinshed's *Chronicles.* The story, as found in this, is in part an abbreviation of Geoffrey of Monmouth's and more or less agrees with it. Cordelia, according to Holinshed, becomes queen after Lear's death, but her nephews making war against her, loses the kingdom, is put in prison and commits suicide. As Shakespeare worked on with the materials, the characters reached such tragic dimensions that anything like a happy ending was unthinkable and he had to bring about the death of the characters even sooner than was expected.

Reference is also traced to Spencer's *Faerie Queene*, Book II, Canto X, stanzas 27—38. I do not find much resemblance between them, for, according to Spencer, King Lear divided his kingdom between Goneril and Regan. Later, he lived with Goneril, but after being ill-treated, went to live with Regan, and there also met with the same fate. He, at last, went to Cordelia, who, as a dutiful child, raised an army, defeated the enemies and established him on the throne and later

he inherited it. But how unlike is it to our author's play! Some critics also suggest Jackville's *Mirror for Magistrates, The True Chronicle History of King Lear and his three daughters, Goneril, Regan and Cordelia,* is also said to have played an important part in the shaping of 'King Lear.' Shakespeare seems to have been indebted to this play for many incidents in his play. For instance, Lear's character is more or less drawn from it.

> "I am as kind as is the pelican,
> That kills herself to save her young one's lives;
> And yet as jealous as the princely eagle,
> That kills her young ones if they do but dazzle,
> Upon the radiant splendour of the sun."

Further, the imperious doom pronounced upon Cordelia, which is the nucleus of the whole tragedy, is related in the following terms:—

> "Cease, good my lords, and sue not to reverse
> Our censure, which is now irrevocable;
> Then do not so dishonour me, my lords,
> As to make shipwreck of my kingly word."

And again in his representation of Goneril's ingratitude, Shakespeare seems to have followed the old play in which it is said that King Lear

> "Sojourns now in Cornwall with the eldest;
> Who flattered him, until she did obtain
> That at his hands which now she doth possess;
> And now she sees he hath no more to give
> It grieves her heart to see her father live.
> Oh, whom should man trust in his wicked age,
> When children thus against their parents rage?
> But he, the mirror of mild patience,
> Puts up all wrongs and never gives reply;
> Yet shames she not in most opprobious sort,
> To call him fool and dotard to his face,
> And sets her parasites of purpose oft,
> In scoffing wise to offer him disgrace
> Oh iron age! O times O monstrous vilde,
> When parents are contemned of the child!"

Mention is also made of the *Metrical Chronicle of Layamon*, Warner's *Albion's England*, and *Le Roman de Brut* of Wace. However, these are of very little importance and the main outline of the story is almost the same.

But we cannot omit to refer to two other valuable sources, *viz.*, 'The Paphlagonian Unkind King and his Kind Son,' in Sidney's *Arcadia* and Camden's *Remains.* The former is almost the only source of the under-plot, the Gloucester episode, and in the latter, Ina, King of the West Saxons, is exactly a replica of King Lear. The following abstract, though a little long, is the origin of the Gloucester episode: "The King of Paphlagonia had two sons, one born in wedlock, the other illegitimate. The bastard treacherously supplanted his brother in their parent's affection, and prevailed on the old man to give orders that his heir should be assassinated in the adjacent forest.

"The king's servants spared their young master's life, who escaped in disguise. Soon afterwards, the bastard rebelled against his father, dethroned him, caused his eyes to be put out, and left him to wander through his kingdom destitute and helpless.

"The good prince, regardless of his safety, hastened to assist his father, and took upon him to be his guide in his affliction. Knowing that the bastard desired the death of the true heir, and that his virtuous son was in peril on his account, the king begged the gentle Leonatus to lead him to the summit of a lofty rock, whence he might throw himself, and at once terminate his own sorrows and his protector's danger. The young man had scarcely silenced these solicitations, when the usurper and his soldiers appeared, and would have slain them both, had not unexpected succour arrived. A war followed, which ended with the usurper's fall, and the advance of Leonatus to the throne." Here it

will be easily understood that Gloucester is the king, Edmund, the usurper, and Edgar, Leonatus. Regarding Camden's *Remains*, Shakespeare's indebtedness to it may be gleaned from the following quotation: Camden says of Cordelia: "The youngest, but the wisest, told her father flatly, without flattery, that albeit she did love, honour and reverence him, and so would, while she lived, as much as nature and daughterly duty, at the uttermost, could expect; yet she did think that one day it would come to pass that she should affect another more fervently; meaning her husband when she were married, who being made one flesh with her, as God by commandment hath told, and nature had taught her, she was to cleave fast to, forsaking father and mother, kithe and kinne."

The fable had also gone into many ballads and metrical compositions among which Percy's *Reliques* may be mentioned as very important. Methinks it is almost probable that Shakespeare drew the idea of Lear's madness from stanzas 16 and 17 and the tragic ending from stanza 22.

Be these as they may, many incidents, if not all, are Shakespeare's own. All the fever, fret and weariness, the awful mystery of this universe; all that is sublime and beautiful in Cordelia; the terror of the storm and the cruelty of the sisters; the dignified bearing of Lear under the worst circumstances; all these are so much more magnified and clarified that the supreme feat of the master-craftsman reveals itself in almost every page. And in conclusion I may apply what Mr. Swinburne has said with respect to another drama of this same man. Alone among Shakespeare's plays, it lives among the great works of the world by the right and might of only such individual scenes and passages as no other man could have given us. The majesty, the magnificence, the depth and breadth of creative thought, the height and reach of interpretative imagination, which inform and inspire the matchless music of the verse, can only be duly acknowledged by forbearance from all attempt at critical definition or articulate recognition of their peculiar quality or their immanent presence.

EUROPEAN EDUCATION. *

Mr. Grieve said that those who read newspapers recently would have seen that the highest authority in the Presidency had been issuing a warning in regard to finance. It was obvious, of course, that they could not have trade depression and lawlessness and at the same time an overflowing exchequer. It was just as well that the management of the European and other branches of education should realise this quite clearly. It was most regrettable that this should be the case. It was true that qualifications in European High Schools were not so good as in Indian schools. Some time ago, a rough estimate was made of the amount that would be required to bring European High Schools in the matter of qualifications on a par with those demanded in Indian schools. The estimate made at that time rather appalled the speaker because it was so high and it was high chiefly because the scale of salaries demanded was what the speaker could only describe as exorbitant.

It was a matter of great regret, said Mr. Grieve, that Anglo-Indians did not come forward in large number to join the teaching profession on reasonable rates of pay. This was a matter that the Anglo-Indian Association should investigate. This was one of the means available to Anglo-Indians. Means were not going to be so many in future that this one could be disregarded. He hoped that the managers of European schools would see whether the difficult and delicate questions arising out of amalgamation of schools could not be satisfactorily solved.

* An Address delivered by Mr. R. G. Grieve, Director of Public Instruction, Madras, at the Second Teachers' Conference of the Doveton-Corrie Group of Schools, with the Lord Bishop of Madras in the chair.

Proceeding, Mr. Grieve said, that he was glad to see that the European schools were indenting on the services of teachers from the Teachers' College. The lectures and group discussions that they had annually were bound to have a beneficial effect on education. As regards the group discussions, the one topic of discussion should be the need for development of school activities. Speaking generally, he said, in no school should the interest of the teacher be limited to the class-room hours. There should be Societies and Associations in which the teacher must take an interest. The teaching of history, for instance, might be made more real and more vital by a historical society. Natural science lent itself to outward study. Similarly with other studies. In connection with all these excursions and visits to museum, harbour, horticultural gardens, etc., might be usefully arranged and organised. There was no doubt that outside activities were one of the important means of training character and of promoting that intimate contact between the teacher and the taught which was much desirable in schools. It might also foster the growth of hobbies which might be carried on beyond boyhood into manhood. Periods of leisure would then be utilised in the pursuit of hobbies and leisure hours would never be boring. Apart from this and apart from the general widening of interest which participation in scientific societies or debating associations might promote, they might have a value in fixing the boy's interests and giving him a more definite aim and idea of what he would do after leaving the school, instead of merely drifting. Of course, it must be remembered that the school could not itself take the place of apprenticing the boys. Apprenticeship must be undergone after leaving the school. At the same time, as far as possible, boys should be encouraged in consultation with their parents and teachers to decide definitely what, on the material side of life, their aim was to be, that when they leave the school they might have a clear objective before them and not simply drift about and finally land in an uncongenial position.

Mr. Grieve, in closing, said that he would always be glad to help them as far as in him lay and wished the Conference a success.—*The Hindu*, 18th Oct. 1930.

"HOW TO GIVE A PRACTICAL TURN TO MATHEMATICS."*

NEARLY four hundred years ago, the first noteworthy book on Arithmetic was printed in the English language. The author evidently felt that an apology was needed for such a book and introduced the subject in the following dialogue :—

Teacher: If number were so vile a thing as you did esteem it, then need it not be used so much in men's communication. Exclude number, and answer to this question: "How many years old are you?"

Student: Mum.

Teacher: How many days in a week? How much land hath your father? How many men doth he keep?

Student: Mum.

Teacher: So that if number you want, you answer all by mummes.

No such apology is necessary now in treating of the subject. Its importance is everywhere recognised and probably no subject in the school curriculum has received so much attention during recent years. In 1900 there were in America only 30 published scientific studies of Arithmetic, in 1929 there were approximately 500 such studies in print. What is the result of all this careful inquiry and patient investigation? We can express it briefly by saying that it has created a new attitude of mind towards the subject. Mathematics is no longer regarded as a mechanical process whose chief value is to develop ability in the manipulation of numbers. We have come to see that it is "an indispensable tool by which all the quantitative relationships in ordinary living can be interpreted and satisfactorily handled." The aim is not to turn out mathematicians but to turn out men who can react intelligently to the needs of the modern world. The *social utility* of the subject is being more and more emphasised.

This should be borne in mind when we speak of "practical" mathematics. There is a danger of limiting the reference to the actual computations made by ordinary men and women in their daily transactions. Some will argue "an ordinary man uses little beyond the simple rules of arithmetic in his daily life and therefore he need learn nothing more." Such a view is entirely misleading and vicious: if carried to its logical conclusion, it would result in the bankruptcy of education altogether.

The educationalist must consider not only what the average man *does* know, but what he *ought* to know. For example, it may be said that a man does not need a knowledge of percentages for his own transactions, but undoubtedly such knowledge will save him from using his money unwisely. "If people in general had a more lively knowledge of the meaning of percentages, they would not do such things as buying on the instalment plan. The sellers of goods on the instalment plan know their arithmetic, buyers do not." Neither would people patronise the local money-lenders with their ruinous rate of interest, if they understood the transaction more clearly. Moreover, without a fair knowledge of mathematics a man cannot take an intelligent interest in the life of the world. One takes up a daily newspaper and reads off such things as Government Loans, War Debts, Customs Duties, Birth Statistics. A

* Report of the Sub-Committee of the Hyderabad Teachers' Association presented to the Fourth Annual Conference.

man cannot take his place as a useful member of society without understanding these things and forming his own opinions about them. And in order to do this, he must have a knowledge of averages, interest, percentages and other mathematical processes, which the severely "practical" man would be inclined to eliminate from the curriculum. This wider reference must be remembered when we come to deal with the question of curriculum.

There is another practical value in the study of mathematics. Here is a subject in which a boy is being constantly confronted with a new situation—a problem which cannot be solved by merely remembering what he has been told, but only by his own original thinking and right application of rules. The problem in the text-book has a value far beyond its own reference. After all, it doesnot matter much to anybody, how long a hypothetical train takes to do an imaginary journey; but if in the solving of that problem the boy is preparing himself to solve urgent practical life problems which will confront him later, the social utility of mathematics is vindicated. Now we may say that the distinctive value of education in general and of mathematics in particular is to cultivate the power of using methods of reasoning appropriate to the problems of life. If this dictum is true, it will have a very important bearing on the kind of method to be followed and the kind of problem to be presented to the student. It should also help us to see that practical mathematics does not mean the ruthless elimination of everything which does not find a place in our ordinary daily transactions.

METHODS.

1. The approach to arithmetical processes should always be from the concrete and actual. This is of vital importance and cannot be emphasised too strongly. So often a child is taught to manipulate figures according to mechanical rules, and the whole process is as far removed from the actual world as is the man in the moon. Children in a certain school who could do quite difficult sums in subtraction were nonplussed when asked to say how many remain from a flock of 50 sheep when 17 had been driven away. Nothing could show more clearly the futility of teaching by formal rules. If the rule is deduced by actual handling of objects, the child sees the meaning of it and the rule becomes a tool with which he can work out all manner of quantitative problems. Numeration may be begun by counting fingers, the number of children in the class, the number of desks in the room, the number of catches in a game, etc. Groups of seeds to be manipulated by the child himself will serve to bring out the *meaning* of the processes of multiplication and division. In higher classes many rules may be arrived at by actual measurement or by observing that the same quantitative relationship holds in a number of cases. Some mensuration lessons might well be held out of doors. The boys should actually pace out distances to illustrate, for example, the relation of the diagonal of the square to its side, or the area of a large quadrilateral marked on the ground. A simple form of clinometer may be used for calculating heights. A mirror placed on the ground may be used for the same purpose. A boy adjusts his position until he sees in the mirror a reflection of the top of a pole, then if appropriate triangles are drawn, the height of the pole may be determined and afterwards measured. The relationship between the radius and the circumference of a circle may be determined by actual measurement of several circles of varying sizes.

In this way every operation will be charged with meaning. Rules will represent the result of experience and observation, and will not be imposed on the student by the authoritative dictum of the teacher. Instead of the constant "Do it like this," the teacher should approach the class with "Now how shall we do this?" He will need to guide the boys at every step but if he proceeds carefully and slowly from what the boys know, they will be able to follow him into the unknown so that that also may become their possession. As a matter of fact the number of rules to be learned is very small. The Four Simple Rules, Fractions and Proportion practically cover all that needs to be taught. Profit and Loss, Percentages, Simple Interest, etc., should be shown to be but special applications of proportion. The shorter and specialized methods of working such sums should only be adopted after the pupil has reasoned out the process for himself. All along the line it should be shown that mathematics is only *common sense* applied to number. If this attitude of mind is inculcated, there will be fewer boys who "have no head for mathematics." Their whole mentality will be changed. Common sense will be a habit of mind that will guide them through all the intricacies of the subject.

2. CONSTANT USE OF APPARATUS.

This admittedly means more work for the teacher but it will repay him over and over again. In some schools where apparatus is provided, it is often neglected. The following are suggested as some useful ways of using apparatus to enlist the interest of the child and to bring home to him the practical nature of mathematics :—

(*a*) Measures of 1 seer, ½ seer, ¼ seer, ⅛ seer can be very effectively used in teaching fractional quantities. By actually handling ⅜ seer of rice, the symbol ⅜ becomes charged with meaning.

(*b*) A foot-rule is a simple piece of apparatus which can be used for teaching fractional quantities as well as measures of length.

(*c*) A bazaar shop with token coins will arouse interest in the dullest boy and will provide excellent practice in simple rules.

(*d*) A post office may be fitted up where home-made stamps of varying values may be sold.

(*e*) A station booking office may be installed; purchasers of tickets find the distance in miles of their destination and calculate from that the amount to be paid for their tickets.

(*f*) A clock face may be used to illustrate the multiplication process as well as a great variety of time sums.

3 GOOD DIAGRAMS.

Good diagrams on the black-board will help to make quantities more concrete, but they must be careful and accurate. A good drawing will often do more to elucidate a problem than any amount of talking. In this connection, graphs should have a much larger place than is generally given to them. Graphs are but pictures of quantity and as such should be used from almost the lowest classes. Simple proportion, for example, can be most effectively illustrated by means of graphs. The upper classes should make graphs from information supplied either by themselves or by the teacher, *e.g.*, the number of pupils in school during a number of years, the variation in the value of British Government and Hali Sicca rupees.

4. THE PROJECT METHOD.

This is the method *par excellence* for giving a practical turn to mathematics. It is not an easy method. It requires tact and enthusiasm on the part of the teacher to be successful. Few schools will be able to carry it out so thoroughly as it has been done at Moga, but in a modified form every school could adopt it for at least one class. A shop project might be given one half of every day for a year. The teacher is given liberty to use the time as he likes, provided that all he does centres round a shop and trading. The class may begin by making a small shop out of wood; this involves careful calculation and measurement. There will be purchases in the bazaar, say of school materials, which may be retailed to other pupils. A profit and loss account will be opened; the class will decide how to invest the profit, etc., etc.

5. EXPLANATION OF THE ACTUAL WORKING OF MATHEMATICS IN PRIVATE, COMMERCIAL AND NATIONAL LIFE.

Lessons might be usefully devoted to the explanation of the Insurance system, the actual procedure in international trade, Government bonds, etc. In this way the pupil will not only be given an intelligent knowledge of the material he is handling in his Arithmetic exercises, but will also stimulate his interest without which no real mental development is possible.

6. To get the best results from the above methods, instruction in the pupils' vernacular, particularly in the lower classes, is essential.

ALGEBRA AND GEOMETRY.

It is admittedly difficult to give a practical turn to these departments of mathematics; in their very nature they are abstract subjects. But even here the right way of approach will help boys to see their utility. The essential value of Algebra lies in the equation. It is recommended that the simplest form of equation should be taught as early as possible. The dreaded "x" may be robbed of its terror, if its meaning and utility are deduced and not imposed on the pupil. Suppose for example, that a problem deals with the "number of sheep which a man bought." Let the pupil first try his hand at sketching the outline of the sheep and substituting this for the whole phrase. Let him continue this for a few problems. Then set a problem where it is difficult to represent the required part by a diagram. Instead of a diagram he himself will probably suggest that it would be easier to use some abbreviated sign, perhaps to use the letter "s" instead of the diagram of the sheep. Then the way will be easy to the use of "x" which may be used in any problem.

A little knowledge of Science will soon convince the boy of the utility of Algebra. In this subject, the equation is being constantly requisitioned. And since Science is only the systematised knowledge of nature, he will see that for a proper knowledge of natural laws some acquaintance with this subject is necessary. For the inventor and research-worker it is indispensable.

In regard to Geometry, we feel that emphasis should be on actual construction and that only a minimum of theory should be required. Why is it necessary, for example, to learn a formal proof of the fact that the shortest distance of a point from a straight line is the perpendicular, when this can be so easily and clearly shown by actual measurement? If the result is arrived at by the boy himself, it will be a much more real item of knowledge than if arrived at through the technical jargon of Euclid. Where it is not possible to establish a general truth in this way, the boys and teacher working together should go through a theoretic proof. But when the truth has been once demonstrated, it is surely a more useful

exercise for the boy to apply the result in solving problems than to memorise the proof.

THE CORRELATION OF MATHEMATICS WITH OTHER SUBJECTS.

The correlation of mathematics with other subjects will show the utility of the former.

(*a*) The drawing lesson may be a valuable ally of mathematics. Scale-drawing is a practical application of the idea of proportion. Drawing from dictation is a very effective exercise for older pupils, *e. g.*, draw a box having a square end, length twice the width, a hinged lid open at an angle of 45°. Map-drawing may be associated with geometrical shapes, *e. g.*, the island of Ceylon can be depicted as a triangle, the length of the sides given.

(*b*) Some parts of the Geography lesson may be linked on to mathematics. Graphs may be made of statistics of local rainfall or temperature. The pupils can make diagrams for themselves to show density of population, given the area and population of a country.

(*c*) Manual work is another good field for applied mathematics. If weaving is done in a school, the cost of thread, charge for labour, charges to cover wear and tear, can all be introduced in estimating price of cloth woven. If carpentry is taught, boys can use their knowledge of geometry by actual handling of materials and so come to understand thoroughly ideas of area and cubical contents. They will see that such calculations are practically useful and indeed vital in the business of life.

(*d*) Reference has already been made to the close connection between mathematics and science.

CURRICULUM.

In framing a curriculum, the guiding principle must be the social utility of the matter prescribed. As explained at the beginning of this report, this does not mean a ruthless elimination of everything which is not directly used in the ordinary calculations of every-day life.

We have concerned ourselves only with the Elementary Mathematics syllabus. Also we have not included the needs of Rural Schools in this survey; that is a subject which needs a more careful and specialised treatment than can be attempted here.

The only curriculum we have seen for the Primary and Middle Sections is dated 1331 Fasli. It is respectfully suggested that the time has come for the publication of a new syllabus.

SUGGESTIONS FOR A REVISED CURRICULUM.

Primary.—It is universally felt that the present syllabus is over-weighted. What is wanted here is a working knowledge of the four simple rules. In the first two classes only such examples should be set as can be illustrated and checked by actual handling of objects. Expression work should be made compulsory.

Standard 1 :—Numeration to 100. Addition and subtraction to 20. All work to be done in the concrete. Where a sufficient variety of actual objects cannot be got, pictures or diagrams may be used.

Standard 2 :—Numeration to 1,000. Addition and subtraction to 100. Multiplication Tables should be built up by the teacher by appropriate grouping of objects, the order being ten times, five times, twice, four times and eight times tables. Multiplication and Division by any of these simple numbers first taught by method of grouping.

Standard 3 :—Numeration to 100,000. Addition and subtraction up to a lakh; remaining multiplication tables; multiplication and division by two digits. Rupees, annas and pies may be used in examples, but not such as involve reduction from one denomination to another. Simple notions of such fractions as ½, ¼, ¾, all in concrete form.

Standard 4 :—Extension of four simple rules to money sums (Indian money), involving reduction. Special emphasis on simple bazar transaction. Large numbers should be discouraged; easy addition of concrete fractional quantities not requiring the finding of L. C. M. Squares and rectangles to be drawn to given measurements. Objects in the class-room to be measured and drawn to scale.

Middle :—The present curriculum seems satisfactory. What is needed here is rather a change of method and a more practical type of questions. Local measures should be used and the use of foreign money should be eliminated.

High :—Arithmetic should include an elementary knowledge of stocks and shares; more attention to be given to sums dealing with rates and taxes. Interest sums should include examples of transactions with the bazaar sowcars reckoning so many dubs per month (thrift may be emphasised here). Wholesale and retail trade and railway freights should be thoroughly well-understood, and possibly questions might be framed on Co-operative Society transactions. We consider that the use of contracted methods serves no useful end. We therefore recommend that less time should be given to such methods and more time be given to commercial arithmetic.

Algebra should be treated as subsidiary to Arithmetic and the more abstract parts of the subject eliminated. Graphs should be freely used to show variation of quantities and for the solving of equations, but not for the solution of problems in time and work, speed and distance, etc. The ground to be covered should be stated much more definitely. To say Simple Factors, for example, is not a sufficient guide for the teachers: the types of the factors to be taught should be expressly indicated. Most emphasis should be on equations.

Mensuration should include the subjects now prescribed *plus* simple exercises on the Field Book. In Geometry the present curriculum may be followed if emphasis is placed on practical construction rather than on theoretical proofs.

CHOICE OF EXAMPLES.

1. Since the aim of mathematics is to teach boys to apply general principles in new situations, problems should be framed with this in view. At all cost, boys must not be allowed to get into a rut of familiar questions. Variety is the spice of mathematics as well as of life. This implies that from the very beginning, mathematics should deal with problems. The mechanical part of mathematics is only its skeleton, problems are its flesh and bones. Moreover, since in life situations there is need to discriminate between essential and non-essential facts, problems should be framed, which contain irrelevant details.

2. Questions should as far as possible deal with things which a boy can visualise, so that he may realise that he is dealing with *things* and not with mere *figures*. Let trains run from Secunderabad to Kazipet; let steel beams be brought from Bombay to Hyderabad; let horses run on the Fateh Maidan. In this connection, it is important to make the figures approximately correct. If the cost of rice is concerned, let it be somewhere near the prevailing price and measured according to local usage.

(*a*) A train leaves Hyderabad at 9-10 and arrives at Vikarabad at 11-5. It makes three stops of three minutes each on the way. If the distance is 45 miles, what is the speed of the train?

(*b*) Three adults and one child make this journey. What is the cost of the tickets at 3 ps. per mile?

(*c*) Six eggs are sold for 5 annas. How much for 51 eggs?

(*d*) Rice is 5 seers per rupee. How much for 27½ seers? (method of grouping).

(*e*) 7 turkeys are bought for Rs. 21-4-0. They are kept for 60 days at a cost of ¼ anna each per day. If they are sold at Rs. 6-12-0 each, what gain will there be?

3. There is a common tendency to set sums with large numbers. Such sums should be set only *occasionally*, for they require the maximum of mechanical work with the minimum of thought. By what possible interest can a boy be stimulated in multiplying Rs. 38,476-14-4 by 347? As far as one can see, the chief value of such examples is to provide a rest for the teacher. Instead of taking up a whole lesson with two long sums, it will often be more profitable to set a dozen small problems.

4. In all examples social utility should be the end in view: for this reason we have suggested the inclusion of stocks and shares, taxes, bazaar interest, etc., in the curriculum, because boys will actually have to make such transactions in their post-school days.

In order to make this report effective, the Committee make the following suggestions to the Education Department.

(1) Principals of schools should be encouraged to make innovations and experiments even though this causes a deviation from the prescribed curriculum (*e. g.*, adaptations of the project method). The Inspector will decide whether such experiments are fruitful or not and will accordingly either give or withhold his sanction.

(2) The curriculum should be revised and the subjects prescribed should be stated in greater detail in order to give better guidance to teachers.

(3) A book of examples on the lines suggested in this report should be prepared by the Department. This will secure the use of local measures and coinage, will give the requisite local colour and will put the right kind of sums in the hands of the teachers.

4. All efforts towards an improvement in the teaching of mathematics will be futile unless a lead is given in the pubic examinations. For the average boy the examination is "the master-light of all his seeing," and he will think that anything not in line with that is beside the mark. The Board of Examiners can do more than all the books ever written to encourage a right point of view.—*The Hyderabad Teacher—Conference Number*—July 1930.

We are asked to publish the following :—

MANIFESTO AGAINST CONSCRIPTION AND MILITARY TRAINING OF YOUTH.

The governments of the world now officially acknowledge the supreme claims of Peace. In the Paris Pact they have repudiated war as an instrument of national policy. Nevertheless preparation for war continues. Especially pronounced is the contrast between the Peace declarations of governments and the maintenance and extension of military training.

Military training takes two forms. In many countries it is imposed by law. In other countries, whilst nominally voluntary, it is imposed on a wide scale by moral or economic pressure. Further more, all governments claim the ultimate right to demand war service from their citizens, men and women.

We urge that the time has come when every sincere lover of peace should demand the abolition of military training of youth and should deny the right of governments to impose conscription. Conscription subjects the individual entirely to the military powers. It is a form of servitude, the habitual acceptance of which only illustrates its deadening effect.

Military training is training of mind and body in the technique of killing. It is education for war. It is the perpetuation of the war mentality. It prevents the development of the will to Peace. The older generation commits a grave crime against the younger generation when in schools, Universities, official and private organisations, it educates youth, often under the pretext of physical training, in the science of war.

The Peace Treaties imposed on the defeated countries the suppression of conscription and the military training of youth. It is time for the peoples of the world to take the initiative in freeing themselves from both.

If governments fail to recognise the strength of the revolt against war, they must expect the resistance of those for whom loyalty to mankind and conscience is supreme.

Let the peoples of all countries demand :

AN END TO MILITARISATION AND CONSCRIPTION!

EDUCATION FOR HUMANITY AND PEACE!

Joint Peace Council,

Vienna.

BIOLOGY AS A SCHOOL SUBJECT.

By Mr. S. N. BANNERJI, B. Sc., B. T.,
The Harcourt Butler School, Simla.

IT is now universally admitted that the knowledge of science is as much of importance as an integral part of education and modern culture as any other subject which goes by the name of humanities.

In fact science has come out of its cloistered laboratory and has trespassed into the domain of art and literature. A rudimentary knowledge of scientific principles seems to be an absolute necessity in the pursuit of any branch of knowledge. There are, however, as many branches of science as there are of art: consequently we have to select primarily those branches of science which are of vital importance to us as human beings.

Of the various branches of science which we teach in schools, as preparatory and introductory to further studies, nothing appears to be so supremely interesting as the science of life. The knowledge of how a steam engine works or how the specific gravity of glass is determined is valuable no doubt but no one can deny the fact that the knowledge of how this life of ours originates, develops and decays, what relationship exists between the plant and the animal life, appears to be of greater necessity and of increased interest. Who would not like to know details of his own self, his own ancestry and his immediate surroundings before acquiring a knowledge of things which are of remote interest to him? The study of Biology will give the young aspirant after scientific knowledge an introduction to those subjects in which he is vitally interested in life.

Biology is the science of life—life of plants and of animals. It deals with the origin, growth and decay of life from the beginning of this planet of ours right up to the modern times. It studies the inter-dependence of various forms of life. It investigates into the conditions which are favourable for the growth of life. It tells us how a certain species deteriorates or improves. This question is important from the national point of view—the fewer the number of births of imbeciles and sub-normals the better for a nation, nay for the whole world, and an effective check can be made on this only by the study and practical application of principles of the science of life embodied in Biology.

Apart from the importance of the subject which alone is sufficient to claim one's attention, there are two other reasons why Biology should be taught in our schools. Firstly, it gives a scientific knowledge of sex, secondly, a variety of subjects such as elements of Geology, Botany, Zoology and Physiology, etc., will be introduced to the children.

The sex instinct is the most important and the most prominent. The sex urge begins to manifest and dominate all our activities from the beginning of the adolescent period. Although this period develops whilst the children are in the school, we scrupulously refrain from giving them any scientific knowledge of, and sound advice in, sex. Consequently at this stage of life, they grope in the dark and are very often misled. The teaching of Biology to school children may improve the situation a good deal.

An outline of the course of Biology for schools is given below. In order to arrange for the teaching of this subject, the initial expenditure is proportionately low and the recurring expenditure is less so. This is no doubt good for the majority of schools in

India which can hardly afford to spend on costly apparatus and equipments of laboratories.

COURSE OF BIOLOGY FOR INDAN SCHOOLS. two years (60 theoretical and 60 double period practical). This syllabus was drawn by Mrs. West, Lecturer of Biology, Teachers' Training College, Dacca.

1ST YEAR.

THEORETICAL :—

No. of Lessons.

2 (1) Origin of the Solar system and the Earth.
10 (2) Geological periods.
3 (3) Simplest life. Protoplasm. The cell. Problem of the origin of life.
2 (4) General idea of Evolution.
2 (5) Adaptation, variation, heredity.
3 (6) Types of life, plants and animals.
7 (7) Types of plants in ascending complexity.

PRACTICAL :—

Draw and observe parts.

No. of Lessons.

8 Plants—Fungi, mosses, ferns, flowering-plants.
22 Animals—Earthworm, mussel, snail, prawn, mosquito, spider, fish frog, lizard. Mammal (cat, dog or rabbit or goat).

2ND YEAR.

THEORETICAL :—

No. of Lessons.

14 (8) Types of animals in ascending complexity.
8 (9) Essential functions of any organism.

No. of Lessons.

2 (10) Tertiary period.
5 (11) Evolution of man.
1 (12) Practical application of Biology.

PRACTICAL :—

5 Microscopy—Green scum, protozoa, protococcoas, spirogyra, amoeba, paramoecium.
24 Dissection of
Earthworm, mussel, snail, prawn, mosquito, cockroach, fish frog.
1 Demonstration of :—
Mammal dissection (goat or rabbit).

APPARATUS REQUIRED FOR TWENTY PUPILS.

2 Microscopes, slides (4 doz.), 20 dissecting dishes, one magic lantern and a few charts and slides.

Each pupil has to buy a dissecting instrument-box consisting of a pair of scissors, scalpels, forceps, etc.

A room furnished with a tap and a sink in the corner may be used for the laboratory as well as for class purposes. Flat high benches (24 inches by 18 inches) may be used as working tables.—*Education*: Cawnpore, *August* 1930.

THE REPORT OF THE 7TH SALEM DISTRICT EDUCATIONAL CONFERENCE.

THE Seventh Salem District Secondary School Teachers' Educational Conference was held this year at Hosur on the 11th and 12th of October under the presidency of Mr. R. M. Savur, B.A. (Cantab.), District Educational Officer, Salem.

This was the most largely-attended Conference of the District, the number of delegates being 64. There was a choice gathering of the public—official and non-official—and Mr. D. W. Dodwell, the Sub-Collector, was among those present on the occasion. The session opened at 10-30 A.M., on Saturday, the 11th October, in the School Science Hall; and after prayers in Sanskrit, Telugu and Tamil, M. R. Ry. A. Ramanathan Avl., B.A., L.T., Chairman, Reception Committee, welcomed the delegates in a short but sweet address in which he stressed the need for strengthening the District Guild, the development of the physique and character of the pupils, the co-operation of teachers in co-ordinating their work for their own benefit and that of the pupils entrusted to their care, and the use of the mother-tongue as medium of instruction in general knowledge subjects.

The President then delivered an original address lasting nearly an hour. He was glad of Teachers' Conferences coming forward to discuss teachers' responsibilities and the best methods of discharging them. He exhorted the teachers to resent the layman's interference in their work, to overcome their besetting sin of inferiority complex and to interest themselves in evolving new and profitable methods of teaching. He discussed the measure of usefulness of the mother-tongue as medium of instruction and exposed, by facts and figures, the hollowness of the claims of the enthusiasts. He next adverted to moral instruction which might be better served by encouraging every pupil to become a boy-scout. He recommended the Dalton Plan for immediate adoption in order to help the 70% of the ineligibles to become useful citizens.

The Conference Secretary read at this stage letters of sympathy from M. R. Ry. Rao Bahadur S. Ellappa Chettiar Avl., M.L.C., President, District Board, Salem, Mr. V. P. Adiseshaiya of Vellore, M. R. Ry. B. V. Ramaswami Sastrigal, Avl., B.A., L.T., Retired Headmaster, Mr. M. S. Sabhesan, Secretary, S. I. T. U., Madras, M. R. Ry. A. Ramaswami Gounder Avl., M.A., L.T., Principal, Salem College, and M. R. Ry. S. Ramaswami Iyengar Avl., B.A., L.T. of Velur, and Messrs. Blackie and Son, Book-sellers and Publishers, Madras.

The evening session began at 3-30 P.M., when the Conference appointed a Committee to draft the ideas which the Reception Committee had put before them, into resolutions.

At 4 P.M., M. R. Ry. N. Subrahmanya Aiyar Avl., M.A., L.T., of the Teachers' College, Saidapet, delivered an interesting lecture on the new S. S. L. C. Syllabus (A Group) in Geography and exhorted the teachers to have regard for home geography and to deal with facts first and generalizations next. After supper, the Committee drafted the Resolutions to be passed at the Conference.

On the second day, there was an excursion to the local river and the delegates were treated to coffee by M. R. Ry. B. Sitaramiah Avl., B.A., B.L., President, Union Board, in his garden, and the morning session began there itself with the lecture on 'Regional Survey,' by the Geography Professor.

At 11 A.M., the District Guild General Body Meeting took place under the presidency of M. R. Ry. A. Ramanathan Avl., Chairman, Reception Committee. The Auditor's report for the half-year ending 1928 and for the year 1929 were read and approved. The S. I. T. U. Secretary's letter regarding the Vigilance Committee Defence Fund was read, and it was resolved to sanction a sum of Rs. 10 from the District Guild funds to the Defence Fund and to request the affiliated Associations to offer individual subscriptions through the Guild. M. R. Ry. M. K. Swaminathan Avl., M.A., L.T., and Mr. Edwin I. Rajaratnam, B.A., L.T., were elected President and Secretary of the District Guild respectively. M. R. Ry. K. S. Chengalroya Aiyar Avl. was re-elected to the S. I. T. U. Executive Board for the Salem District Guild. The Secretary's letter to the members of the Executive Committee requesting them to treat the loan amount of Rs. 50 paid to the *South Indian Teacher* as a life subscription to the journal was read and ratified. M. R. Ry. K. S. Chengalroya Aiyar was elected as a delegate to the Pan-Asiatic Educational Conference and a sum of Rs. 10 was sanctioned for his expenses from the Guild funds. On the motion from the chair, a resolution expressing appreciation of work done by the President, M.R.Ry. B. V. Ramaswami Sastrigal Avl., B.A., L.T., and by the Secretary, M. R. Ry. C. A. Natesa Aiyar Avl., B.A., L.T., was passed. It was also resolved to authorise the District Guild Executive Board for publishing the Hosur Conference Report from the Guild funds. With a vote of thanks proposed by the Asst. Secretary, Mr. K. S. Chengalroya Aiyar, to the Chairman of the meeting, the meeting was brought to a close.

The evening session began at 3-30 and the District Collecter, Mr. A. H. A. Todd, and Mrs. Todd graced this session with their presence, and Mr. Chellam Iyengar spoke a few words on the Discharged Prisoners' Aid Society.

Mr. R. M. Savur then delivered his lecture on 'Psychology and the Teacher' in which he put forward, for the use of teachers, bold and practical suggestions in the light of recent researches in Psychology. Individual work for pupils is a pressing need, simple and graded work must be framed, proper environment and training must be secured and parents and teachers must work together for making the pupil a full-blooded citizen.

Some seventeen resolutions were passed at the Conference, the most important of which are as follows:—

1. This Conference requests the management to arrange for refresher courses by experts for the benefit of teachers.

2. This Conference while expressing its appreciation for the encouragement given so far to the S.I.T.U. Journal, 'The South Indian Teacher,' exhorts all the teachers of the District to really profit by it by subscribing it in large numbers.

3. This Conference exhorts such of the institutions of the District as still keep aloof from the District Guild to affiliate their Teachers' Associations to it and thereby strengthen it, and requests the President, the Secretary of the District Guild and the D.E.O. to form themselves into a Committee to bring in such institutions into the Guild.

4. This Conference is of opinion that the present Provident Fund Rules applicable to teachers in Municipal and Board Schools are illiberal inasmuch as they make it optional to give or withhold the whole or part of the

bonus, and it therefore urges on the Government the need for making the grant of full bonus obligatory on the managements.

5. This Conference requests the management to build quarters for the members of the staff within the compound of or in close proximity to the school.

6. This Conference requests the management to appoint a librarian for each secondary school who could be of service as a reserve teacher.

7. Inasmuch as the present system of specialization in the revised S. S. L. C. course is not of much help to the pupil to choose his optional subject in the college course and inasmuch as most of the optional subjects usually selected by the pupils at present for their S. S. L. C. course are included in the 'A' group, this Conference is of opinion that specialization in the S. S. L. C. course be abolished.

8. This Conference requests the management to be pleased to grant subsidies annually equal in amount to the total 'Games Fund' contributed by the pupils during the year.

9. This Conference requests the management to open hostels immediately in secondary school centres where the need for them is keenly felt.

10. This Conference again appeals to the members of the different Teachers' Associations in the District to take advantage of the Protection Fund instituted by the S. I. T. U.

11. This Conference requests all the Co-operative Societies in the District and the Salem District Urban Bank, Ltd., to set apart from their Common Good Fund a decent sum for purposes of scholarships to poor and deserving pupils of the various schools in the District.

12. This Conference resolves to request the management that in view of the high educational value of school excursions, they may be pleased to undertake to pay half the expenses involved in such excursions.

13. This Conference requests the management to grant to each secondary school a sum of Rs. 200 for starting tennis courts for the recreation of teachers.

14. This Conference resolves to accept with great pleasure the invitation of the Dharmapuri Board High School Teachers' Association to hold the next session at Dharmapuri.

The President in his concluding remarks exhorted the teachers to be more self-assertive and dynamic and try to imbibe the latest researches in psychology and adopt suitable methods for training pupils.

After the vote of thanks to the President, delegates and all others concerned, the Conference was dissolved.

FIRST ALL-ASIA EDUCATIONAL CONFERENCE.

Benares, December 26th to 30th, 1930.

LIBRARY SERVICE SECTION.

AN APPEAL

ENTHUSIASTIC replies are being received from overseas. The Assistant Director of the National Library of the Philippine Islands writes "I desire to congratulate you and your colleagues most sincerely for the happy idea of holding the Conference." Here is Japan writing: "Many, many thanks for your letter. It is very timely to hold such a Conference at such a time and in such a country as yours. I wish it will be the first Pan-Asian Educational Conference in name and in reality." Here is another from California: "I consider it an honour to be asked to assist you in preparing the programme for the Library Service Section of the First All-Asia Educational Conference." The Director of Publicity of a Library in Iowa thinks that the All-Asia Educational Conference "should be a marked step forward in Education in India." She adds, "Every one is interested in your great country and the things that you are accomplishing." The Librarian of the League of Nations, Geneva: "I am honoured by your request that I should submit a paper to the First All-Asia Educational Conference."

Brother teachers and brother librarians of Bharatavarsha, every mail from overseas is bringing in papers. Nine promises and four actuals have already come. Bestir yourselves and put in your quota. The names of the present generation of our teachers and librarians will go down to posterity as those that ventured to take the epoch-making step of inviting the First All-Asia Conference; Let it not be said that we were found wanting.

Education and its latest agent, the Library, are surging forward. They want the concentrated thought of one and all of us. When papers pour in from all the countries of the world, it stands to reason that we the hosts in India, should contribute an equal number. India can do so, only if each of you make your contribution.

Papers relating to School Libraries, College Libraries, University Libraries, Public Libraries, Rural Libraries, Commercial Libraries and other special libraries—papers on every aspect of Library Science—Reports of the larger libraries of our land—Reports of Library Associations—are all welcome. Please send them before the 15th of November to

Mr. S. R. RANGANATHAN,
University Library, Triplicane, Madras.

Reviews and Notices.

THE REVIEW OF PHILOSOPHY AND RELIGION, Vol. I, Nos. 1 & 2. (PUBLISHED IN POONA). Annual Subscription; Inland: *Rs.* 4; Foreign: 7*s.* 6*d.*

The Editorial Committee of this Review deserve to be warmly congratulated for starting and working this very useful instrument of spreading and popularising knowledge in Philosophy and Religion. This is the journal of the Academy of Philosophy and Religion which has on its Board and Academic Council almost all the men known to the Indian philosophic world. At present it is published twice a year, but soon promises to be quarterly with the growth of public reception and encouragement. The type and get-up are neat.

The Review welcomes discussion and study of the different cultures of the world and will be glad to publish the philosophic activities of the different Associations in India and elsewhere. The catholicity of the organisers can be easily inferred by their definition of the philosophic outlook as the development of "the quality of sane, well-reasoned and independent judgment based on a man's own conclusions and arising out of his own thinking about life." It is a welcome feature that the Academy is inspired by the ideal that Philosophy and Religion far from contradicting, support and supplement each other, thus bringing out prominently the significance and importance of the Hindu synthesis of *jnana* and *anushtana*.

The contributions to the two numbers under review reveal that the authorities concerned have chosen competent scholars to present their viewpoints which are fairly representative and comprehensive. The articles on "Time and Change" and "The Problem of Value" deserve special mention. The remark that Ramanuja "assigned predominance to the emotional element and not to the rational in the relationship of Bhakti or devotional surrender to the Infinite" (*vide* p. 13, "Reign of Realism in Indian Philosophy) seems to be inspired by the popular erroneous notion of Ramanuja's teachings and cannot be substantiated by any student of *Sri Bhashya*. Scholars of Ramanuja's Philosophy find in his system a harmonious synthesis of *jnana, anushtana, vairagya* and *bhakti*. The article on "The Chronological Position of Visistadwaita" reviews the familiar controversy regarding BodhAyana and DramidAcharya. It must be confessed that notwithstanding the enthusiasm of a number of scholars, very little light is thrown on the chronological sequence of the different Indian systems. The truth seems to be that the older generation of scholars had a peculiar sense of humility which was responsible for ignoring the historic details of authorship, place and time, in their enthusiasm to continue and carry on what they considered to be the message of their *Sampradaya* or *Parampara*. Anyhow the uncritical notion prevalent in some circles that the more ancient doctrine is the more valuable, is inimical to the development of philosophic valuation which pays attention to the inherent merit of a system. The author of the article on "An Idea of Universal Religion" may be reminded that every religion claims to be universal and professes to satisfy the whole of human nature. While it is certainly laudable that the spirit of toleration must be regarded as the necessary sign of a cultured mind, it is impossible, nay undesirable, to pray and work for a universal religion and a universal philosophy.

The reviews at the end of the issues of some of the recent books on the philosophic literature are equally valuable, and the long criticism by Prof. K. Sundara Rama Iyer on "Sri Sankara Hrdaya" is so interesting and thought-provoking that both the book and the criticism deserve special study.

THE LIFE AND DEATH OF KING ARTHUR—A PLAY, BY F. H. JONES. (MACMILLAN & Co, LTD.) Pp. 25. *Price* 6*d.*

This book is the result of a practical theatrical tried at Wellesley School at Croydon. There are four scenes, the first three of which are prose, in imitation of "Morte d'Arthur." The last is compiled by putting together passages from Tennyson. The book will help to fill a 20 minutes' show at a school-show. The author gives practical guidance for dress and stage equipment.

THE KING'S HIGHWAY—A MORALITY PLAY, BY F. H. JONES. (MACMILLAN & Co., LTD.) Pp. 37. *Price* 6*d.*

This miniature morality play describes Youth passing through a wood and meeting with trials and temptations and overcoming them at last. Experience and wisdom of the immortals and folly, sloth, opposition, craft, subtlety and vice among the enemies of man take part in the play.

PHILIPS' "STUDY-WORK" ENGLISH, BY E. K. MOLLOY. (GEORGE PHILIP & SON, LTD.)

BOOK II, Pp. 95. *Price* 1*s.*
„ III, Pp. 84. *Price* 1*s.*
„ IV, Pp. 104. *Price* 1*s.*

These three books contain graduated lessons in grammar and composition. There are some excellent illustrations in book II which will be useful for composition. The lessons are aimed at being very practical, and one fears if they may not be too practical sometimes. After all, printed books may be content with providing suitable material for an intelligent teacher's use. But it is clear great pains have been taken in these books to provide concrete courses to teach children the use of words, and the constructing of sentences and paragraphs and the writing of essays and stories. Teachers must feel thankful to have them.

THE AUTOBIOGRAPHY OF EDWARD GIBBON, EDITED BY B. GROOM. (MACMILLAN & Co., LTD.) Pp. xiii + 200. *Price* 1*s.* 6*d.*

This is an addition to "English Literature Series," and provides an introduction and notes at the end. Gibbon's autobiography derives its interest from the forceful and original mind of the author, and this edition will serve to make the work accessible to youthful readers who have been hitherto fed only on Boswell's Johnson.

MATRICULATION ENGLISH, BY J. W. MARRYOTT. (G. G. HARRAP & Co., LTD.) Pp. 263.

This is a very bright book which may be used in the High School and even in the Intermediate course of our colleges. Teachers and pupils will find it an advantage to use the book regularly. It will also stimulate a real interest in language and literature study.

The book comprehends a large number of themes like the use of the dictionary, style, paraphrasing, precis writing and so on. A chapter on Figures of Rhetoric treats the subject fully. A useful summary of grammatical terms is rightly reserved to the end of the book. We should unhesitatingly recommend this book for use in language and composition classes.

IDYLLS OF THE KING IN TWELVE BOOKS, BY ALFRED LORD TENNYSON, WITH A PREFACE, INTRODUCTION AND NOTES, BY J.H. FOWLER. (MACMILLAN & Co., LTD.) Pp xxvi + 348. *Price* 3*s.* 6*d.*

We congratulate the publishers and the editor on bringing out this book. It is needless to ask now whether Tennyson's poetry is really great. In a carefully and concisely written introduction, Mr. Fowler quotes Mr. J. W. Mackail's words about the "Idylls": "Lines and phrases and passages in them are as imperishable as the English language." We are grateful to have the Idylls in the present form. The editor shows mellowed scholarship and excellent judgment in his introduction. In a way Tennyson will have to be judged by the "Idylls" and the putting together of all the relevant notes about them, is entirely justifiable.

The Educational Review.

Recruitment to Indian Services.

Whatever interested critics may say regarding the necessity for a British steel frame in the Indian services, Sir Ross Barker, the President of the Public Service Commission in India, has no hesitation in thinking that this country itself offers very good material for recruitment to them. He is prepared to assert in the memorandum which he submitted to the Statutory Commission on India that the material available in India for recruitment "*is excellent and sufficient in quality to satisfy any claims that are made upon it.*" This is high testimony indeed, coming as it does from a person who has occupied such a responsible position as the Presidentship of the Public Service Commission during the last four years and has had opportunities for examining thousands of young men who have passed through his hands. It is also good to remember that Sir Ross has had extensive educational experience in England also and the remark can be considered to have been based on a knowledge of comparative conditions in both the countries. To the common criticism from the Britisher that the Indian is only a crammer of text-books and does not make a good administrator though he may pass examinations with distinction, Sir Ross is ready to give an absolute refutation. He writes: "So far as suitability can be judged at the age of 22 or 23, he sees little or nothing to choose between the English and the Indian candidate." It is hoped this will give the lie to those who are opposed to further Indianisation, and we shall hear less and less of the supreme necessity for preserving the British element in the services! Another interesting point which has arisen in this connection is the steady deterioration in recent years of the quality available in England for recruitment to the Imperial Services in India. Owing to the altered political conditions in this country, the Services do not command the prestige which they did at one time and have lost something of the glamour which they possessed of old. It is therefore not surprising that the best brains of the Universities are not attracted to them as is evidenced by the fact that it has become quite common for Indian students who fail in the Indian Civil Service Examination in India to pass without any trouble in England. It is understood that even the Public Service Commission is perturbed by this unfairness and is contemplating measures to counteract it.

The Fifth All-India Teachers' Conference.

We must congratulate the South India Teachers' Union on the excellent report it has published of the proceedings of the Fifth All-India Teachers' Federation held last Christmas in Madras. The volume is very well got-up and contains a considerable amount of valuable material besides the addresses of the Chairman of the Reception Committee, the President of the Conference and the concluding speech of Principal Seshadri, the President of the All-India Teachers'

Federation. It will be remembered that one of the special features of the last All-India Teachers' Federation was the reading of a large number of valuable papers on educational subjects. The report contains all of them and also brief summaries of the discussions which followed. We commend the volume to the notice of all teachers in India and we hope a copy of it will be placed in the Library of each Secondary School. Copies can be had on application to the *South India Teacher*, Triplicane, Madras.

The Andhra University.

Now that the question of the headquarters of the Andhra University has been definitely settled and the University is located permanently at Waltair, we hope that something will be done for doing real University work under its auspices, besides holding the annual examinations. If the Andhra University is intended only to hold the ordinary degree examinations, it need not have come into existence at all and the students of the Andhra districts could have continued to sit for their examinations at Madras. It would be surprising if the entire Andhra country continued in its present backward condition without any provision for the teaching of Honours and Post-Graduate courses. The earlier the University undertakes its legitimate work of teaching, at least the Post-Graduate classes, the better for the future of the Andhra country. There is a claim, with a certain amount of justification, that there has been in recent years a cultural renaissance in the Telugu country, a renaissance in literature and in art worthy of intelligent and sympathetic guidance. What is the University doing for advancing this movement? Where are the intellectual leaders the University has gathered round itself to lead this movement? Has there not been a certain amount of stagnation in recent years in the Andhra country in the matter of intellectual and cultural progress and who is responsible for this sad state of affairs? We hope that the activities of the Andhra University during the next few months will furnish a suitable answer.

Asiatic Conference of Women.

There is considerable educational importance attaching to the First Conference of Asian Women which is going to be held in Lahore early in January. It is significant of the present awakening of womanhood in India that they should have been able to hold successful annual All-India Conferences and they should be able to come forward now to hold an Asian Conference to which they have asked women representatives from many countries outside India. The aims of the first Asian Conference have been stated in the following words by the organisers of the movement :—

1. To promote the consciousness of unity amongst the women of Asia, as members of a common Oriental culture.

2. To take stock of the qualities of Oriental civilisation, so as to preserve them for national and world service.

3. To review and seek remedies for the defects at present apparent in Oriental civilisation.

4. To sift what is appropriate for Asia from the Occidental influences.

5. To strengthen one another by the exchange of data and experiences concerning women's conditions in the respective countries of Asia.

6. To promote world peace.

The presence of conditions of social efficiency and happiness is absolutely necessary for educational progress and if Conferences of this kind will serve the purpose of introducing a more congenial atmosphere for educational advancement, they will have done something very valuable.

Education and the Round Table Conference.

We had heard that education was of such great importance to the grant of further political privileges in India that no progress was possible till more attention was paid to the subject. In a sudden fit of enthusiasm the Government of India had even appointed a Committee, as an auxiliary to the Simon Commission, to examine the progress of education in the country after the reforms, to consider what further advance of political privileges may be possible. It is therefore surprising to find that in the constitution of the ensuing Round Table Conference, there is hardly any provision for the expression of educational opinion, the solitary representative of the profession being Dr. Shafaat Ahmad Khan of the University of Allahabad, who has also been chosen not so much as a representative of educational opinion, as an exponent of Moslem politics of a particular type. The Conference will be packed with lawyers who have unfortunately always monopolised attention in this country and it is doubtful if any of the weighty educational issues which will come before the Conference will receive adequate attention. In spite of the elaborate attention paid to the subject in the Hartog Committee's Report, it is also curious to note that the Simon Commission dismisses it with scant courtesy, with the brief statement that it is generally in agreement with the recommendations made by the Hartog Committee!

All-Asia Educational Conference.

We are glad to find that the arrangements for the All-Asia Educational Conference in Benares are progressing satisfactorily. A large number of buildings in the neighbourhood of the Central Hindu Collegiate School have been secured for the use of the delegates who will attend the Conference and we hope their comforts will be attended to in the best manner possible. Several distinguished speakers will address the Conference including Sir J. C. Bose, Sir C. V. Raman, Dr. Annie Besant, Dr. Bhagawan Doss, Pandit Hridyanath Kunzru, etc. Apart from the general sessions of the Conference, there will be a large number of sectional meetings, the following being among them :—

Primary Education; Secondary Education; University Education; Women's

Education; Adult Education; Library Service; Health, Hygienic and Physical Culture; Kindergarten and Montessori Systems; Moral and Religious Education; etc.

There will also be an Educational Exhibition held under the auspices of the Government of the United Provinces, besides such attractions as an All-India Teachers' Tennis Tournament, Scout Displays, etc. All communications regarding the Conference should be addressed to Pandit Ramnarain Misra, B. A., Headmaster, C. H. Collegiate School, Benares City.

Educational Science at the British Association.

Several important speeches were made at the Educational Science Section of the recent annual meeting of the British Association. In the course of his Presidential Address, Lord Percy dwelt on the need for lengthening the period of schooling and stimulating the general atmosphere of enlightenment in the country. "A policy of higher education," said Lord Percy, "must be built up in response to the outside demand of the work-a-day world, that 'fair field full of folk, the rich and the poor, each working and wandering as the world requires,' where men are adding to the sum of human knowledge and human activities. The most important fact about this outside demand is that it is a demand for mental keenness rather than for physical skill. This demand for mental keenness means, for most occupations, longer schooling and schooling directed primarily to the training of the mind." A speaker from Toronto spoke on the need for educating parents, the average mother and father being, according to him, thoroughly unfit for the education of the child. A mother should take courses in parents' education for three years and during that time she might not bother the children, because she did not know how. There were other pleas at the Conference made for raising the school age of children at school. A discussion on education for commerce elicited the truth that in considering education for commerce they must have clearly before them the truth that the conduct of business to-day required in its personnel, in addition to sound character and attractive personality, a high order of ability, knowledge and skill and in its organization the adoption of scientific methods throughout.

The Education of the Depressed classes.

Only sporadic attempts have been made in various parts of the country to tackle the question of the education of the depressed classes. It is therefore interesting to note that the Government of Bombay has made an attempt at a systematic treatment of the subject within its own jurisdiction. The Committee appointed by the Government of Bombay in 1928 to enquire into the educational, economic and social condition of the depressed classes and the aboriginal tribes has just published its report and besides furnishing interesting reading, it contains useful suggestions for the solution of the question in other parts of India. The Committee accepts the recommendation of the Hartog Committee that attempts should be made to merge the pupils of the depressed classes into the rest of the community, rather than segregate them into separate schools. The latter course, it may be observed, is likely to result in the evil consequences. It will perpetuate the evils of the caste system from which we are anxious to escape and it will not enable members of the depressed classes to get out of their sense of inferiority to those who belong to other castes. Another recommendation is that the staffs of these schools should be mixed, so that there may be no feeling of aloofness and distinctions may gradually be wiped out at least within the four walls of a school building. Bonuses for keeping children of the depressed classes in schools and the closing of inefficient schools for concentrating attention on a few efficient ones are among the other recommendations made by the Committee. The problem of wastage in education is attacked next and it is suggested that to keep literacy alive, pamphlets in simple language should be issued and circulated among the people. The Committee pleads for an extension of the exemption of fees to pupils of the depressed classes including college education. It is also recommended that there should be scholarships specially set apart for the depressed classes for study abroad and scholarships for industrial training. It may be useful to secure a similar systematic survey of the education of the depressed classes in other parts of India. It is good to remember that on the proper solution of the question depends the happiness and prosperity of millions of people in India.

Asian Culture.

The interesting suggestion has been made that in connection with the ensuing All-Asian Educational Conference to be held at Benares in Christmas, there should also be an Asian Cultural Conference, to bring together all those interested in Asian Culture for the purpose of conserving its best elements. No useful purpose will perhaps be served by the addition of another Conference to the large number of Conferences which will meet in Christmas in various parts of India, but there can be no doubt on the main question that unless efforts are made for preserving the integrity of Asian Culture, it is likely to be merged into the civilisation of the West which is making such violent inroads into it. It is therefore proposed that some distinguished representatives of Asia present on the occasion should meet there on one of the days of the Conference to consider if any steps can be taken in the direction. When it is said that the following will be among those present at the Conference, it will be realised that there is the possibility of some satisfactory solution of the subject: Sir J. C. Bose, Sir C. V. Raman, Prof. Radhakrishnan, Dr. Annie Besant, Dr. Bhagawan Doss, etc.

Benares Hindu University.

Lord Hardinge's name will always be cherished with gratitude in India and it is interesting to note that he will shortly be in this country on a visit, mainly in connection with the opening of New Delhi. But another interesting function in connection with his visit to India will be his presence in Benares on the 2nd January 1931 as the guest of His Highness the Maharaja of Benares to see the Benares Hindu University, whose foundation stone he laid sixteen years ago early in 1914. When Lord Hardinge laid the foundation stone of this University, the neighbourhood consisted almost entirely of fields and straggling hamlets. The progress of the institution within this interval will astonish the distinguished visitor. He will find buildings extending over a square mile harbouring a large colony of about two thousand teachers and students and containing libraries, laboratories and the other appurtenances of a modern University. It is a very graceful act on the part of Lord Hardinge to visit Benares and we have no doubt the authorities of the Benares Hindu University will also be delighted to receive a visitor who was responsible in no small measure for the foundation of the University and the support secured for the institution, at least in the earlier stages, from the ruling princes of India.

The Indian Institute of Science, Bangalore.

The affairs of the Indian Institute of Science, Bangalore, have always been a matter of grave dissatisfaction with the Indian public. In spite of its endowment by an Indian and the generous support meted out to it by the Government of His Highness the Maharajah of Mysore, it has been a close preserve for European patronage and in spite of the great progress made by Indian scientists in the Universities and the international renown which some of them have won in recent years, it has continued, more or less, as a European concern. Great hopes were excited in connection with the enquiry conducted into its affairs some years ago by a Committee appointed by the Government which consisted with others of Sir Ashutosh Mukkerjee, Sir William Pope and Sir C. V. Raman. Whatever improvements may have been effected in the actual working of the scientific departments as the result of the appointment of this Committee, it is difficult to say if Indian interests have been safeguarded and adequate scope has been provided for the great talent available in the country. It is therefore with some disappointment that we read of the appointment of another Committee to enquire into its affairs, the *personnel* of which is not likely to satisfy the Indian public The Committee is to consist of Lt. Col. Sewell, Director of the Zoological Survey in India, Dewan Bahadur K. Ramunni Menon, Vice-Chancellor, Madras University, and Mr. Richardson, Chief Electrical Engineer, Kolar. It is disappointing to find that the list does not include any of the well-known scientists of Indian Universities, not a single non-official Indian, but the Government had probably its own reasons for appointing a Committee of this kind! In any case, we do not anticipate that its deliberations are going to be of much use to the country.

The Mysore University.

It was an excellent address which was delivered the other day to the University of Mysore by Professor S. Radhakrishnan, on the occasion of the annual Convocation of the University. Professor Radhakrishnan attempted another definition of the functions of a University, though it is based largely on Cardinal Newman's famous views on the subject. Professor Radhakrishnan said :—

> A University is a fellowship of spirits, a society of seekers of truth who believe that there are things in life of vastly greater import than wealth and comfort, necessary as these are. It affirms that the pursuit of ideas and inspirations is greater than the race for power and glory. To belong to a University is to share this way of looking at things and feeling about them, to acquire this largeness of view which can assuage the asperities of life. Culture is born of meditation on the best that has been said and thought on the intimate problems of life, in the University which is a retreat from the crowded world, for solitude and study. A man into whose soul there has passed in some small measure the soul of great literature and art, philosophy and religion, will find a significance in life that would otherwise be hidden from him. He will develop an inner grace of nature, a tendency of the soul which makes him live in constant and confident communion with the unseen, even when tormented by earthly passions.

Professor Radhakrishnan ventured upon discussing subjects of wider interest and referred to the Round Table Conference now meeting in England :—

> The eyes of the world are now fixed on the Round Table Conference which is to meet soon in St. James's Palace in London. If the delegates meet in the mood of share-holders anxious for their dividends, there is little hope of any right settlement. India is not a subject to be administered but a nation seeking its soul. For the Indian mind, ideas are more potent than facts even though the ideas may be illusions. The Indian thinks and feels in terms of national pride and self-respect. He stresses the shame of subjection and the lines of sorrow which even the best Indians bear in their faces. While the British seem to exaggerate the demands of security, the Indians emphasise the right to liberty. Security and liberty do not always coincide. Are we to have the maximum freedom consistent with the minimum safety or minimum freedom with the maximum safety ? That is the problem. No heavier task than that which awaits the British is ever likely to fall on it. If one course is fraught with risks, the other is fraught with greater risk. While conflicts of interests can be composed by reason and argument, conflicts of passions produce fear and suspicion, which make all peaceful solutions difficult. The problem can be solved only by that sympathetic understanding of another's point of view and by that true stafesmanship, which steadily looking to the future avoids stressing the obstacles which loom so large in the path of the mere politician whose eye and whose ear are on the ground only one step in advance of his feet. Many of us who wish well for peace and freedom hope fervently that Great Britain will rise to the height of its vast opportunities, take occasion by the hand and make the bounds of freedom wider yet.

Education in Soviet Russia.

Anything written by journalists at the present time regarding conditions in Soviet Russia has to be taken *cum grano salis*, but it is curious that there should be such conflicting opinions regarding them. While dreadful descriptions have been given about the relapse into barbarism in that part of the world, accounts have also been furnished on other hands, of the progress made there in several directions. The Chairman of the Illiteracy Section of the World Federation of Educational Associations has furnished certain figures which are extremely complimentary to those responsible for the Government of the Soveit

B. A. Honours Degree Examination, 1931.

	Rs.	A.
CHAUCER—Prologue, with Introduction and Notes, by W. J. Goodrich, M.A. ...	1	0
——————by G. Maddox, B.A. Reduced price	0	4
——————Knight's Tale, Part I. Lines 1 to 629, with Introduction and Notes, by E. H. Elliot, B.A.	1	0
——————Nonne Preestes Tale, with Introduction and Notes, by the same Editor.	1	2
SHAKESPEARE—A Midsummer Night's Dream, with Introduction and Notes, by Rev. R. Scott, M.A. ... —	1	6
——————Henry V, with Introduction and Notes, by P. H. Sturge, M.A. ...	1	6
——————Twelfth Night, with Introduction and Notes, by M. Macmillan, M.A. ...	1	12
——————Othello, with Introduction and Notes, by the same Editor	1	6
MILTON—Paradise Lost, Book I, with Introduction and Notes, revised by E. H Elliot, B.A.	0	14
——————Paradise Lost, Book II, with Introduction and Notes, by W. Bell, M.A. ...	0	12
POPE—Rape of the Lock, with Introduction and Notes, by E. E. Kellett, M. A. ...	1	0
TENNYSON—The Coming of Arthur, Introduction and Notes only, by E. H. Elliot, B. A.	1	2
——————The Passing of Arthur, Introduction and Notes only, by the same Editor	0	12
——————Ulysses and other poems, with Introduction and Notes, by the same Editor	0	8
MATTHEW ARNOLD—Scholar Gypsy and Thyrsis, with Introduction and Notes, by the same Editor	0	12
MATTHEW ARNOLD—The Forsaken Merman and Balder Dead, with Introduction and Notes, by the same Editor ...	0	12
DRYDEN—Preface to the Fables, with Introduction and Notes, by P. Seshadri, M.A.	10	0
LAMB—Essays of Elia (Selections) with Introduction and Notes, by J. H. Stone, M A.	1	4
CARLYLE—The Hero as Poet, with Introduction and Notes, by Rev. S. Gnanamuthu, M.A.	0	8
MATTHEW ARNOLD—Essays in Criticism, containing Marcus Aurelius and Literary Influence of Academies, with Introduction and Notes, by P. Seshadri, M.A.	1	0
ADDISON—The Coverley Papers, with Introduction and Notes, by E. H. Elliot, B.A.	1	12
COLERIDGE—The Rime of the Ancient Mariner, with Introduction and Notes, by E E. Kellett, M A.	0	12
——————Christabel, with Introduction and Notes, by the same Editor ...	0	12
SHELLEY—Adonais, with Introduction and Notes, by W. E, Hoare, M.A, ...	0	10
KEATS—Isabella, with Introduction and Notes, by E. H. Elliot, B.A.	0	12
BYRON—Childe Harold's Pilgrimage, Canto I, with Introduction and Notes, by E. E. Kellett, M.A.	1	0
——————Do. do. Canto IV, with Introduction and Notes, by E. H. Elliot, B.A.	1	0
SWEET—A Second Anglo-Saxon Reader, Archaic and Dialectal, Part 2. Rs. 3-6 Reduced to	2	0

REGD. NO. M. 272.

Printed and published by Srinivasa Varadachari & Co., No., 4, Mount Road, Madras—5-11-1930.