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THE INDIAN EDUCATOR

MR. V. ARAVAMUDA IYENGAR, B.A., L.T. — *Managing Editor.*

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Education an Ascending Stairway

BY DEWAN BAHADUR K. S. RAMASWAMI SASTRI, B.A., B.L.

If Education is, as the etymological meaning of the word shows, an unfolding or a drawing out, we have to do the work of revealing the divine in us through all the sheaths of the soul. As the body is the tabernacle of the soul, we have first and foremost to make the body a revealer of the soul instead of being what it is now—an obstruction or hindrance to the self-expression of the soul. The body should be fitted by proper food and exercise to be a channel for our self-expression. The food should be vegetarian and non-stimulant and non-luxurious. It should be capable of increasing our physical health and strength and longevity and augmenting our mental purity and calmness and poise and happiness. No intoxicating beverages should be taken. In the same way exercise should be such as to develop all the parts of the body in a harmonious way. The western games are costly and lead to lop-sided development. But they develop the team-spirit and the power of combination. I would therefore suggest that our youth have indigenous exercises in the morning and western games in the evening. In addition to such exercise, they should practise *Brahmacharya* and *Yoga*. They should rise in the early hours of the morning and practise indigenous games and bathe in cold water and offer their prayers and practise breath-control and meditation.

A body so trained and disciplined will in its turn influence our tendencies and desires. It will instinctively shrink from impurity and excess and will silently influence the mind also against mental impurity and passion. Side by side with the disciplining of the body, we must discipline the mind also. The Lord describes in the *Gita* the three-fold discipline of the body and speech and mind by the single word *Tapas*. (Ref: *Gita Ch. XVII, verses 13 to 15*).

The mind consists of emotion, intellect and will, and each of these aspects must be disciplined, remembering at the same time that they are a unity in trinity and a trinity in unity. In the case of young boys and girls, we must begin by stimulating the right emotions and repressing the wrong emotions. What are right emotions and what are wrong emotions? Broadly speaking altruistic emotions are right emotions and egoistic emotions are wrong emotions. Bertrand Russell puts the distinction in a telling way by contrasting creativeness and possessiveness. The things that we can enjoy while sharing with others are finer and nobler than the things which we crave to enjoy secretly and by excluding others. Another way of looking at the discipline of the emotions is the inculcation of the proper attitudes towards our superiors and equals and inferiors. These attitudes are reverence, comradeship, and tenderness.

An yet another way of disciplining the emotions is emphasised by the *Yoga Sutras*. When we see a happy man, we must love him. When we see an unhappy man, we must sympathise with him. When we see a good man, we must be glad. When we see a bad man, we must avoid him. If we guide ourselves in this manner, our minds will become calm and clear.

The discipline of the intellect should follow the discipline of the emotions but the latter discipline must also go on with the former. There is nothing higher than Truth. Our whole life should be a ceaseless search for Truth. The enemies of such a search are haste and dogmatism and intolerance. It is the intellect that reveals the Law that governs the universe and the purpose and the goal of life. It pursues the methods of induction and deduction, and of analysis and synthesis. When our intellect attains keenness and poise, it recognises and reveals to us the orderliness of creation and the purpose of God. The poet says in *Locksley Hall*:

"Yet I doubt not through the ages one interesting purpose runs,
And the thoughts of men are widened with the process of the suns."

The mind becomes fuller and fuller of light and vision. Memory and imagination and imagination are equally vivid and aglow.

Then comes the discipline of the will. The power of judgment, the capacity to make right choices in life is the greatest of our duties and of our privileges. Such a discipline is the crown of all the other disciplines and must go along with the continued discipline of evolution and of intellect. Wisdom is the ripe fruit, while emotion is the flower

and intellect is the unripe fruit. The flower has its fulfilment in the unripe fruit, and the latter has its fulfilment in the ripe fruit.

When we have such disciplined bodies and senses and minds, we will be able to get the power of intuition or soul-discernment, because the external sheaths will then cease to be hindrances to soul-expression. The man of intuition will find his path in life lit up by an inner light. Wordsworth says in his *Happy Warrior*:

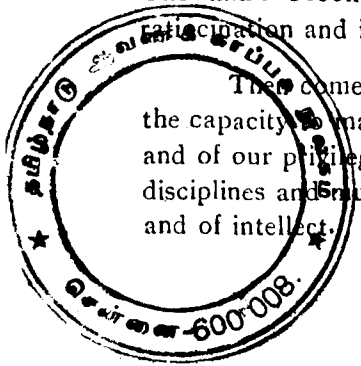
"Whose high endeavours are an inward light
That makes his path before him always bright".

Such a man will know how to serve his brethren aright and will be able to realise God and establish the Kingdom of God on the earth. It is he alone that can realise his oneness with the Creation and with the Creator. In him we see the three rays of Beauty and Goodness and Truth proceeding from the central sun of Infinite Love which is Infinite Bliss, and Infinite Bliss which is Infinite Love.

Correlation as a factor in Education.

BY MR. S. M. DUTT, M.A., B.T.

1. Since it is extremely difficult to treat a subject isolating it completely from the rest, Correlation which consists in showing the interdependence of one study upon another comes in. As a principle, Correlation should be largely availed of in imparting knowledge to boys in Schools, as in the hands of a school-master it is a great weapon to make a lesson interesting. Good teachers in all ages have established some sort of connection between one study and another. What was implicit in the past has been made explicit in the present age. The chief reason why correlation as a principle is so strongly insisted upon by the Educational authorities seems to be that the curriculum of instruction in schools several years ago was too much crowded. The range of studies was extended and a multiplicity of so-called subjects lengthened the time-table of schools. For instance, Reading, Recitation, Grammar, Composition and Translation were separately taught in three different periods. Similarly, Mensuration, Arithmetic, oral and written, were assigned different hours and taught by different persons. The result of this is not at all satisfactory. The responsibility of teaching being divided, no teacher is expected to teach the subject properly showing its intimate connection with different branches. Complaint has been



received from teachers themselves for the bad result of boys in a class for the neglect of this principle in framing the time-table.

2. Each subject being divided into several parts and treated independently, the relations existing between different studies have been neglected and artificial barriers have been created between one study and another. To give one concrete instance, our boys can hardly get to think that there is close connection between Algebra and Arithmetic though they are aware that both come under Mathematics. That the symbols of Algebra are not some unmeaning signs but that they stand for concrete realities can only be understood when an Arithmetic problem is solved with the help of Algebraic formulae.

3. Correlation of studies brings about a simplification of School course by treating different branches of one and the same subject together and produces great economy of time and effort.

In many schools there are still separate hours for teaching Grammar, Dictation, Composition and Translation. Now-a-days it is considered injudicious to assign separate hours to different parts, since they are essentially connected with literature lesson. The connection between certain studies is so close that they do not find a distinct place in the curriculum but have been amalgamated with one another. In English Schools there was a separate hour for object lessons but since it is found that all studies should be objectively illustrated, such a practice has been dispensed with. Drawing as a separate subject is disregarded and independent drawing in lower forms of the Schools is not encouraged by the majority of educators. But unfortunately the Education Department does not recognise the principle. As to economy of time and effort, an illustration from history will make it clear. In reading a lesson on Lord Clive in an English Reader, reference becomes necessary to the scene of action where the hero achieved his brilliant success. Incidentally several facts may be gathered about the battle of Plassey which not only rouse the interest of boys in the study of History but saves the labour of the teacher of history to some extent.

It is a pity that the teacher of literature will not consider it a part of his duty to inculcate facts of history but will think it as outside the range of his subject though some amount of historical information is essential for the elucidation of the materials of study.

4. Correlation is primarily concerned with the linking of different studies to each other. In describing an event in History, it is hardly possible to convey a clear idea of an event without associating it with a certain place. Also in the field of literature a person can be best studied in relation to his environments of which he is more or less a

product. The materials of literature again are derived from all sources. Geography is not only a supplement to History but its lessons ~~teach~~ ^{teach} with natural science dealing as it does with rocks, plants, animals and races of men. These studies are vitally connected. Hence in laying down a curriculum they should be given their distinct place. A close scrutiny of the syllabus of studies in existing schools will reveal that the principle of Correlation is not properly observed. Organisation of knowledge takes place only when a course of studies has been well arranged and selected in view of the number of and variety of important relations existing between them.

5. To a student when he enters the portals of a school leaving behind the joys of home and play ground the school is rather a prison house, where he goes creeping like snail. He places himself in an atmosphere which has nothing in common with his surroundings. If the teacher cannot lay hold of the inner thoughts of the child, the School is a place which the pupil will shun. As women have tender feelings and greater sympathy with children, they are more qualified to train them than male teachers. It is for this reason that elementary education is gradually coming under the control of women.

6. In selecting teachers for the lower forms great discrimination should be made. It has been the practice to place one or two trained teachers of higher forms to conduct lessons in the elementary department of a High School. But such teachers have proved unsuccessful and have even found it difficult to maintain discipline in their classes. They cannot adapt themselves to their new environment and consequently fail to deal with such things for which there are not sufficient points of contact in the minds of their pupils. It does not seem to be a sound policy to attach primary classes to High Schools.

7. An immense influence may be created by a teacher upon the minds of his pupils when he makes them feel that the school is not an artificial place but the world in miniature. Dry and intricate lessons may be made pleasant and simple when their practical utility is pointed out and some sort of connection is established between the school and the outside world. An attempt must be made by the teacher to convince the student that most of the things he learns in school may have their application in life. By following this process it has become possible for me to rouse the interest of the most lethargic boy. Unfortunately the attention of our teachers has not been directed to this kind of practical work. Hence the Training Colleges in different provinces should make strenuous efforts to change the angle of vision of the existing teachers in High Schools.

Difficulties in putting Educational Theory into Practice.

BY MISS A. B. VAN DOREN, M.A.

It is a truism to say that there is always a great gulf between the ideal and the real. No poem or picture or song ever fulfils the dreams of the poet or artist or musician who creates it. "A man's reach exceeds his grasp" in every line of creative effort. A sadder thing in life is found in cases where no ideal exists—where poor performance satisfies the performer and no "spark disturbs our cold".

In Indian education we find both conditions existing side by side. Any one who reads current newspapers and Magazines, from the constant flood of criticisms and complaints, knows something of the deep dissatisfaction with present day education which fills the minds of thinking people. On the other hand there are vast masses of unthinking people including many teachers and parents who are so deep in the ruts of the old regime that they feel no more dissatisfaction than the proverbial frog in the well. Discontent is ever the mother of progress and perhaps the first step in spreading such discontent is to be taken through analysing and broadcasting the reasons for failure. Why do we fail to make our schools as good as we might? Why do we not live up to the best we know in educational theory?

The first obstacle we may mention is the weight of the old literary tradition. The aims of traditional education are to enable the student to read books—not necessarily with understanding to wield a pen, and to add up columns of figures. These abilities secure for their possessor a place in a fixed caste—the caste of the "educated" who are removed from the vulgar herd of those who labour with their hands. In some few cases membership in this "caste" leads also to a "white collar job". This ancient tradition until lately prevailed also in the West, but there, to a large degree, new theories of education, re-inforced by economic depression and unemployment, have prevailed, and education is coming to be recognised as a series of meaningful activities.

The second hindrance, closely allied to the first, is the existence of an inflexible Government curriculum, and an examination-centred school system. Particularly in high school classes, these conditions deprive schools of all spontaneity and make the teaching formal, lifeless, and wooden.

The conditions of teachers' training provides another formidable handicap. In some Provinces untrained teachers are still employed in large numbers. Such teachers teach as they were themselves taught, which means the perpetuation of old and formal methods, or of no methods at all. There are schools to be seen where English is still taught by the translation method, and where the master still reads the history text book to his class. Some training colleges still employ the formal methods of the last generation and year by year send out fresh relays of teachers to perpetuate them. Even where training colleges do use fresh and stimulating methods, it is most difficult in one or even two years to supplant the old methods which years of schooling have made into habit patterns. It is natural and easy for all of us to teach by the same methods as those by which we were ourselves taught. When and how is the vicious circle to be broken?

One more obstacle to be mentioned is the large size of sections and crowded time-table of the teacher. In some high schools a maximum of 40 in a class is expected, and this may be increased to 45 by special sanction which often is all too easily obtainable. A class of this size prevents the close personal relations which should obtain between teacher and pupils. I have visited many classes where the master gave no sign of knowing the names of his students; "you" or "next" was the usual form of address. The pupil is not an interesting human being to be studied and understood and encouraged and befriended; but a mere unit of mass-production. The teacher has little time for professional reading and study, for thorough preparation, or, most important of all, for getting to know his boys on the playing field or in their homes. In these matters, girls' schools are far ahead of boys'.

Destructive criticism is easy. There is no difficulty in pointing out faults in curriculum, method, and organization; what is much harder is to show the way out. The present writer has no *Eureka* to proclaim, but ventures to suggest a few steps that may be taken in the right direction.

1. Teachers' Associations may bring pressure to bear upon Ministers and Departments of Education. With the coming in of the new Constitution there is a chance to influence opinion before it settles back in the old mould. Congress ministries are prepared for change, and desire improvement. The recent report by Messrs. Abbott and Wood shows a way of getting education out of its old grooves. Among the changes that may be pressed for are the following:—

(a) A modified curriculum. In the last few years progress has been made in emphasis upon the use of the vernaculars ; if an equal amount of progress is made in the training of the hands, the diversion of of boys to pre-vocational courses, the use of practical methods of teaching, the emphasis upon pupil activity, and the development of initiative and judgment, we shall see real advance.

(b) The reduction of the size of classes so that teachers may be able to have closer personal contacts with their pupils.

(c) Emphasis upon training. In all Provinces there should be insistence that only trained teachers shall be employed as permanent members of staff. In the training schools lies the root of the whole matter ; it is through them that new ideals in curriculum and method must be built into the fibre of the future teachers of the land. Among other things they need to develop an interest in Child Study, and place greater emphasis upon carefully supervised practice teaching.

(d) Departments of Education should also be asked to encourage in each area a few progressive schools, preferably aided schools, by giving them freedom to experiment along various lines. What Moga has accomplished in experimental education of the elementary grade, should be done for Secondary Education as well. Attention is called to what Ushagram at Asansol, Bengal, has accomplished in this line. There is need for the encouragement of many "Ushagrams", each choosing its own line of experiment, and demonstrating its problems, its successes, and even its failures. The visiting of experimental schools should be a recognised part of training.

2. But, while working consistently for changes in education policy, it is not necessary to fold the hands and wait. Even, under present conditions, there are better schools as well as poorer. A good teacher can enliven the worst curriculum yet invented.

(a) Every school can begin to improve its methods at least in the teaching of one or two subjects. Geography is a good place to start, as many Training Colleges have introduced improved Geography methods. A room set aside for this subject and a well-trained enthusiastic specialist can enliven the curriculum at, at least, one point. Some schools introduce new methods of teaching in one or two periods a day—e.g. a school shop run as a "Project" and linked up with the work in arithmetic ; history taught by using the "assignment" system of the Dalton Plan ; individual work sheets adopted in the teaching of English or the mother-tongue. A school cannot revolutionise its methods all at

once without confusion ; every school can make a beginning by encouraging its most progressive teachers to experiment in one subject ; if successful, the experimental attitude can spread year by year.

(b) Another fruitful line of reform is the introduction of hand-work or pre-vocational courses. Every one interested in this idea should study the conclusions of the Abbott-Wood report. The Jey Narayan High School at Benares has done outstanding work in shifting its centre of interest from the books to the hand, and in requiring every member of the staff to fit himself to teach one industry. Schools not prepared to go to this length may introduce various forms of hand-work through a "hobbies club" which meets out of school hours. In such a club every boy or girl chooses the form of hand-work which appeals to him or her, and all the work is done on the Project Principle. The new Ministries are deeply committed to education of the hand and are sure to be sympathetic toward such experiments.

(c) Where hostels are attached to schools, they may do much through their community group life, to make up the deficiencies of the curriculum. Through a Panchayat or House System of self government, through student responsibility for food management, through the development of flower and vegetable gardens, and in innumerable other ways, initiative, judgment, the habit of right choice, as well as experiences of worship and service may be developed. In day schools such training is difficult but not impossible. The House System can be developed in connection with school sports ; school entertainments and inter-communal dinners can be managed by the pupils ; social service and work for literacy can be carried on through the Scouts or Seva-Samiti. Here too, though unable to do everything, each school can initiate at least one or two extra-curricular projects.

(d) Again the crux is found in the personality of the teacher. In him we find the final cause of the success or failure of the school. When a teacher stops learning, his professional decay sets in, and is soon followed by intellectual death. How can teachers be kept fresh and forward looking ? How can they be induced to form habits of reading and study ? Where can they get the necessary books ? How can they be taught enough psychology to be interested in the study of the child and adolescent ? While we hope for and strive after Training Colleges that will create all these desirable attitudes and habits, it is useless for us to mark time. The head of every school can do something through an up-to-date library ; through teachers' meetings with papers, reviews, discussions, debates ; through social evenings and staff

dinners of fellowship ; through the use of motives of patriotism and religion. When several schools are found in the same town, inter-visitation may be encouraged ; exhibits and demonstrations may be arranged ; teachers' tours can be organised to places of interest ; holiday or week-end refresher courses may be planned. When the teacher is stimulated the school will be awake ; when the teacher is dull, the school, too, goes to sleep.

This paper does not pretend to be exhaustive ; its writer only desires to stimulate the reader to find out for himself the causes in his own institution of the lag between theory and practice ; and the ways in which his own staff may be induced to bring their work up more nearly to the level of their ideals.

B. & O. Teachers' Journal.

You are not old!

"AGE is a quality of the mind;
If you have left your dreams behind,
And hope is cold;
If you no longer look ahead,
And your ambition's fires are dead,
Then you are old.
But if from life you seek the best,
And if in life you keep the zest
And love you hold,
No matter how years go by,
No matter how birthdays fly,
You are not old."

Place of the Village School in Village Uplift.

BY MR. D. V. CHICKERMANE, B. A., B. T.

The problem of village uplift is a very important one and demands foremost attention from all those who have the welfare of this country at heart. Village Improvement Committees formed in some places are doing good work to bring the villager in touch with the modern civilization and improve his conditions. But there remains a great deal of work, far more than what has so far been done. The work done by village improvement touring buses and occasional visitors to lecture to the villagers on topics of interest to them, is desultory and has to be supplemented by consistent and continuous work by some permanent agency. Employment of paid persons to do this work is out of question in these days of financial stringency. But some work, however, can be done by the Village school and the schoolmaster in this direction.

The most serious handicaps of the villagers are poverty and ignorance. In fact, the former is aggravated by the latter. Ignorance of villagers in ordinary business, partly due to their illiteracy, puts them to a great deal of expense, and hardship. They are often easily duped by middlemen who carry on a profitable trade at their expense and rob them of their due for their labour. How villagers are often victims to the greed of rapacious moneylenders and have often to lose even their small belongings, is a common experience. The ideas of villagers about health, hygiene, sanitation and infectious diseases are very quaint and it is no wonder that the poor village folk are exploited by the priests or fortune-tellers. Nine out of ten villagers, will attribute a malarial fever or some simple domestic ailment to the influence of evil planets or village deity and will run with coconuts, cash and other offerings to the local temple priest for propitiating the angry deity.

For the improvement of the condition of the villagers, it is necessary that this colossal ignorance should be removed and the farmer made to shake off his conservative and superstitious ideas, lest he should fall a prey to parasites who drain off his hard-earned money. The village schoolmaster commands respect in the village and is regarded by the populace all round as a—perhaps the only—learned man near by. The village school can be the meeting place of the workers in the evening after their daily toil and then the schoolmaster can talk to them on topics of general interest. He can

arrange for occasional lectures on sanitation, hygiene, and modern methods of business and agriculture and also inculcate them in their civic responsibilities. When possible, he can illustrate his talks by suitable lantern slides, to be supplied to him by some central agency.

The village schoolmaster will have usually to make two classes, those who are young and anxious to be literates, and those who are past forty and too much advanced in age to be inclined to begin learning now. The latter will have to be content with such general information as the teacher will impart to them. For these he will read articles of interest on different subjects from periodicals and acquaint them with the latest news in the country and interest them in general politics. For the former he will have to conduct regular classes. If every school in villages undertakes this kind of adult education, tremendous progress will have been achieved in a short time.

To carry on this kind of work successfully, the village schoolmaster should possess firstly necessary qualifications and secondly sufficient leisure. At present teachers in village schools are recruited directly after their passing the vernacular final examination and their knowledge, even to suit them for their job, is very meagre. Better read and better qualified teachers will have to be engaged. Some training in rural uplift work and adult education should also form part of the Training College course. As regards leisure and time for the overworked teacher for doing adult education work, the present primary school course will have to be remodelled and the time at present devoted to purely literary work will have to be halved. On an average six hours are devoted now to purely literary work in schools and educationists are now agreed that this time can be curtailed to its half without any loss to efficiency in teaching. Manual training and physical education do not form, at present, part of the primary school course. If these are included, time devoted to mere teaching work will have to be necessarily reduced and the teacher can find sufficient leisure to carry on other work. It is expected that the work of manual training and physical education will be in the hands of other teachers specially trained for them.

Where such work is undertaken by the village teacher, he will be guided by the village Improvement Committee and a small remuneration may be paid to him from its funds to encourage him in his work. The teacher will also keep a regular record of the work done and report the progress to the higher authorities periodically.

The Aims & Methods of Mass Education.

BY PROF. DIWAN CHAND SHARMA, M. A.

(Extracts from a Broadcast talk delivered from the Lahore Radio Station on the 31st January, 1938.)

Speaking in America after the conclusion of the Great War the late John Galsworthy said, "Nevertheless, the essential new factor is, that, whereas in 1914 civilisation was on two planes, it is now, theoretically at least, on the one democratic plane or level. That is a great easing of the world-situation, and removes a chief cause of international misunderstanding. The rest depends on what we can now make of democracy. Democracy is neither government by rabble, nor government by caucus. Its measure as a beneficent principle is the measure of the intelligence, honesty, public spirit, and independence of the average voter. Intelligent, honest, public-spirited, and independent voters guarantee an honest and intelligent governing body."

He further asked the question, "What then can be done to increase in the average voter intelligence and honesty, public-spirit and independence?" and himself gave the answer, "Nothing save education". Today in India also one finds a similar spectacle. The leaven of the democratic principle is at work everywhere in British India as well as in the Indian States. That this augurs well for the future of India everyone will admit. But at the same time no one would deny that if India is to be made safe for democracy the Indian masses must be educated.

The problem of the education of the peoples of India has always been a grave and urgent problem. It has always engaged the attention of the administrator, the statesman, the social reformer, the educationist and the philanthropist, but though the desire has always been insistent the means have been wanting and the methods have been not always successful.

Yet the problem of mass education in India means nothing more than the liquidation of illiteracy. About two years ago an enquiry was conducted by the British Institute of adult Education about the aims of mass education and what the students said about these was highly interesting. One student said that he read because he wanted to know himself; another said that his objective was to extend his intellectual

horizon; some one said that the aim of education was to produce an intelligent democracy or to enable the masses to lead a fuller and better life and to make them capable of thinking for themselves and not be led by press and other propaganda. Many of the students were thus actuated by two motives, the culture motive and the social motive. They wanted the enrichment of their personalities, and they wanted to be centres of usefulness and service in this disordered and distracted world. But no such motives operate in India at present so far as mass education is concerned. Even if they are there, they are remote. Here the main objective is the removal of illiteracy and this is not something to be scoffed at. In a country where only about eight per cent of the population is literate, the extension of literacy becomes more or less a sacred, nay a religious duty. This becomes all the more necessary when we remember that the percentage of literacy is much below this amongst the rural population of India, and that the so-called depressed classes and the women in the villages show a woeful lack of education even in the three R's. The extension of mass education therefore becomes an imperative duty, for it would have untold advantages. It would raise the level of the intelligence of the citizen making him better fitted for coping with the demands which his daily life makes upon him. On account of it he would become a better peasant or trader and would be more hospitable to modern methods of agriculture or trade. As a voter he would become more steady and balanced and would no longer remain at the mercy of biased press propaganda and clever emotional appeals. Again, this kind of education may do something to remove that sectarian strife which has been the bane of our life in India. He may acquire tolerance and learn to appreciate the good points in the different peoples that inhabit India and the different religions to which the Indians owe allegiance. Above all, he may learn the simple virtues of cleanliness in life and may rebel against the insanitary conditions that prevail all over India in villages as well as in towns.

But if such are the aims of mass education the question is, What methods can we adopt to carry them into action? I think the four methods that are open to us to spread the blessings of mass education are:—

1. Adult schools.
2. Propaganda in the form of lectures, cinema films and other kinds of open demonstrations.
3. Libraries.
4. The Radio.

It should, however, be remembered that our chief weapon is the adult school and that propaganda, however extensive or intensive, and libraries, however numerous, and the Radio, however well equipped, can come in only as allies.

It is, however, worthy of note that something is already being done to disseminate literacy. In the three British provinces of Bombay, the Central Provinces and the Punjab there are quite a number of adult schools which claim a few lakhs of students. The other provinces of India also, and especially Bengal, have taken a step forward in this direction. Only recently there was formed in Bombay the Bombay City Literacy Association with the object of spreading literacy. It is conducting 21 Marathi classes for women and 2 for men, 8 Gujarati classes for men and 1 for women; in all 44 classes attended by about 1700 adults and taught by 76 teachers. In the same way, the Bombay Presidency Adult Education Association has been conducting some literary classes for factory workers, office peons and Harijans. At Vile Parle, a suburb of Bombay, a night school has been opened which is attended by peons, tailors, barbers, factory workers, railway servants, milk-men, domestic servants and others. In the Satara district in the Bombay Presidency a similar experiment is being carried on for the benefit of the peasant. The Poona Adult Education League has several schools under its control where adults are given instruction to enable them to read and write. Similar attempts are being made in Muzaffarpore in Behar. The Calcutta Corporation recently made arrangements for the education of adults who are doing manual work. It started schools for carters and sweepers. It also gave grants in aid amounting to about Rs. 12,000/- to a hundred privately managed night schools. The Karachi Corporation also embarked on a similar experiment. Recently the Municipal Board of Allahabad has undertaken a wide campaign to wipe off illiteracy within its limits.

But it is not only in British India that vigorous efforts are being made to outlaw illiteracy. In the State of Baroda illiteracy is looked upon as a kind of social disease and every effort is made to do away with it. In the Cochin State also there are quite a number of adult schools where efforts are made to stamp out illiteracy. There are some other progressive Indian States also that are alive to the dangers of illiteracy.

But it is not only the provincial governments and the Municipal Boards in India that are aware of this problem. Some philan-

thropic agencies such as the Y. M. C. A., the Depressed Classes Mission in Mangalore, the Servants of India Society of Poona, the Seva Sadan Society of Bombay, the Dev Dhar Reconstruction Trust in Malabar, the Bengal Society for the Improvement of the Backward Classes and the Harijan Sewak Sang are also doing their best to fight illiteracy. In this connection the work of the Poona Seva Sadan Society which was founded by Mrs. Ramabai Ranade deserves special mention. This Society, among many other beneficent activities, seeks to combat illiteracy among women. It has special primary classes for grown up women, which can be attended from 1 p. m. to 5 p. m. every day and where women of ages ranging between 15 and 35 are educated.

But all these attempts are nothing when compared with the vastness and complexity of the problem. India has millions of adults who require to be educated and these sporadic, stray and casual attempts for their betterment cannot solve the problem. Voluntary agencies may be helpful, but they cannot deliver the goods in a short time. The Municipal Boards and Committees of India may plan a drive against adult illiteracy but even they cannot accomplish this task within their own jurisdiction, unaided and unhelped. The provincial governments and the administrations of Indian States may do better than any of these, but even they cannot force the pace of things, handicapped as they are by financial considerations. Still this problem could be solved if all these agencies joined hands in this noble work. Other countries also had similar problems to face, but they have solved them without much delay. In Turkey and China literacy has made rapid strides, and the Soviet Russia has worked wonders in this direction owing to the principle of universalism in education. In 1917 the Soviet Russia had only 33% of literate population, but it planned a campaign for the education of the masses and the result was that in 1928 it had 58% of literates in Russia. But the efforts in this direction were not relaxed after that and in 1934 they had 90% of literates. It is really remarkable how they achieved all this in such a short time. Not to speak of Russia even a small sub-country like Wales is making heroic efforts for extending adult education within its bounds.

To say this is not to minimise the efforts that are already being made in India. At least of one thing one can be certain and that is this that in this country we are becoming exceedingly alive to the need of extending literacy amongst the adult population. Only recently I chanced upon some schemes which aim at abolishing illiteracy. One of these schemes is drawn up by an advocate of Allahabad, who claims to impart literacy in six weeks by teaching an adult two hours every day.

According to it the adult so trained can read at the end of six weeks ordinary story books and write a simple letter in his own language. In this scheme the cost per head of spreading literacy would be Rupee one and Annas eight in the towns and about Rupee one in the villages. This is a very cheap and quick method though one cannot say that it can produce the desired result. Another scheme that is more ambitious and more comprehensive has been drawn up by the Education Officer of an Indian State. According to this scheme an adult is required to attend the school only for two hours every night. He is taught not only to read and write, but also to take an intelligent interest in the world around him. So in addition to the instruction in the 3 R's., he is given many other side interests. The school begins with a prayer and a song, the meaning of which is explained to the students. Then the alphabet is taught by means of the chart or the black-board or the primer. This takes about half an hour, and when it is found that the student is not feeling interested in this a short story is recited or a newspaper reading is given. After this a short talk is given on some topic of social, hygienic or agricultural interest. After this the school closes with a short prayer.

But it should be remembered that the extension of adult education cannot be achieved by means of mere schemes, however simple or ambitious. It can be done only if we have the will and the resources. I believe that the will should come from the people and the resources should be supplied mainly by our governments and partly by the people themselves. It is therefore a task that should be undertaken by the Municipal Boards and the District Boards and the funds at their disposal should be supplemented by philanthropically inclined persons. It should therefore be made obligatory on every Municipal Board and District Board to remove illiteracy within its jurisdictions. In this matter they can seek the cooperation of the many unemployed educated and the teachers of various schools. Acharya P. C. Ray said some years ago in the course of a lecture in Lahore that in China mass illiteracy had been removed by the University students who had settled down in the villages and taught the people as a labour of love or for a bare living wage. I think something like this could be attempted in this country also. It need not be said that the advantages from it would be manifold. But if this is not done, it may take India 1150 years, as a representative of the World Literacy Committee, computed to abolish illiteracy.

Hobbies and their Utility in Education.

BY MR. V. V. DIVEKAR, B. A., B. T.

We often notice that the collective instinct is present in children and they are often found collecting things of different colour which attract their notice. The duty of elders, then, is to divert it to proper channels and then it would certainly develop and that hobby is sure to lead them to make proper use of the materials they have collected and in the long run it may even redound to their benefit and even profit. For have we not heard of people in England and other foreign countries getting rich by their hobbies which have not only given them pleasure in the act of doing it but have led them to fortune?

Now let us take a few of the most important hobbies, and see how far they help one in receiving instruction or in making researches. First of all let us deal with photography. There are students, whom I know, who are in the habit of collecting beautiful snapshots, that off and on appear in Weeklies and Photo Art journals. Thus they make up an Album, which in the course of years, in case the hobby is pursued very long, go on adding and will ultimately enrich his collections. If there be a rich man, as in England, who takes a fancy for the collection he may even go in for the collection at a great cost. This habit, therefore, will lead to the development of his instinct and he may either be a good photographer or an artist. Child is the father of man and whatever direction he turns his attention to, there he will surely develop his talent. We are aware of the fact that in the Illustrated Weekly of India there is a weekly snapshots competition and the first prize, which is worth much, is carried away by the best photographer. Mr. J. C. Taraore of Bombay, who after his graduation took to photography, has shone in that line. In these days of unemployment as many avenues of employment as are available are quite welcome.

Similar to this is the collection of beautiful pictures. When one shows a liking for pictures we generally conclude that he has an inner craving for art and we should as far as possible try to divert it to the proper channel. There it will find proper scope and field where his natural talent may often show itself off. We read that in nations like England teachers and parents take care to watch the natural bent of a child's mind and try to place before it possibilities for its natural early development. If one were to go on collecting beautiful pictures one may in course of time have such a big collection that even a decent building would be insufficient for the purpose. In short he might even possess a small Art gallery in his own house. While I am writing this I am reminded of Mr. K. S. Vakil, M. Ed., once our Educational Inspector and now Principal S. M. T. Teachers' College, Kolhapur, who has

developed the habit of collecting beautiful picture Post-cards from all the countries he has so far visited. His collection has now grown to be so big that one big storey in a Government High School was quite insufficient to exhibit his collection. I need not emphasise that such a collection is extremely useful in a class of History and Geography to drive home the matter, to make the teaching realistic, effective and at the same time interesting and instructive. Every School, therefore, should make attempts to keep a large stock of good, interesting and instructive pictures. The Pictorial Education issued by Evans Brothers of London abound in such pictures of great educational value and every school should as far as possible not only subscribe to the magazine but also should keep the collection for occasional use in the classes.

Now I come to another useful hobby namely collection of stamps. I read only the other day that one was able to find out the years in which the kings ascended the thrones with the help of the postage issued from time to time. This is but natural. When one arranges the stamps of different countries in an Album and tries to study the same one is able to discover the political changes that took place in a country. Let us take for example Portugal. When we place side by side the stamps in their natural order we at once notice when that country became a Republic, or for the matter of that, let us take the case of South Africa and study from the postage stamps the changes in the form of Govt. from a Dutch Republic into the Union of South Africa. I have heard that in foreign countries such collections of stamps fetch a high price and a faddist might even offer a fancy price for a postage stamp which is very rare. Now taking the case of India, if we take up a postal stamp of May 1935, we learn therefrom that it was the year in which the Silver Jubilee of His Majesty King George V took place.

One more hobby to which boys and even elderly people devote themselves to, is the collection of rare coins i. e. numismatics. This is only another way of tracing the history of kings and countries and also great events by striking new coins that occurred in a country. If a king or a Govt. took it into its head to commemorate great events by striking new coins in that year, as great kings of old did in olden days, we are able to record from the coins the great events that occurred. We meet with such collections of ancient and modern times in all Museums e. g. the Prince of Wales Museum of Bombay, and there are scholars, who have devoted their life-time to the study and the understanding of those coins and thus to connect the events and write history. Taking for example the coins of Vijayanagar, scholars like Prof. Iyengar and Father Herras have read history in those coins and have also made many valuable researches.

Now taking into consideration the collection of stones, which plays an important part in the study of Geology, we find that Geologists take great care to visit centres of interest to them esp. in valleys of rivers and mountains and collect stones which speak them and are made to tell them their own life history. A Geologist will take care to preserve the stones and specimens he has collected to keep them in his own Laboratory to name them and date them, and, they would also write down their own remarks on them. We read that students in colleges generally start on Geological tours in the course of which they collect lot of geological specimens and learn a great deal about the geological phenomenon.

Before I close this article I should like to refer to one more educational activity and that is gardening. Every school is expected to have a garden in its compound to serve not only as an ornament to the school but also to serve the purposes of a Drawing Class, where pupils learn to draw specimens from nature and the students of Botany, who also require natural specimens to experiment on. In November last I had been on a visit to the Hospet, where I availed myself of the opportunity to pay a visit to the Municipal High School, which has been beautifully situated. The Head Master of the High School, Mr. Bhat, was kind enough to take us round and I was extremely interested to see that the Head Master along with some of his Assistants was engaging a batch of students in gardening during the last period of the school day. I complimented the Head Master on this happy innovation and desired that schools all over India would try to follow suit. I need not dilate here on the usefulness of a school garden but suffice it to say that it develops in the minds of young students the habit of spending their spare time very usefully. We have heard of Florists in Bombay and other cities of India, who have amassed large fortunes by supplying flowers to the public at the proper time i.e. on festive occasions. This is no doubt a very useful avocation and in these days of unemployment it will certainly provide an avenue of service atleast to some of the educated un-employed. Scouting also lays great stress on gardening on account of its great utility.

These are some of the hobbies which help man in life and at the same time to use his spare time usefully. I am reminded here of the words of Dr. Barlow in Sandford and Merton who tells Tommy Merton that he who does not work has no right to eat. Similarly, I would beg to suggest that he who does not use his spare time properly has no right to exist. I do hope that my readers will ponder over the above and do what little they can to develop as many of the hobbies as they can among the students entrusted to their care.

German Films for Medical Faculties

Professors become Cameramen

FROM A CORRESPONDENT

How new operations are performed—Moving pictures teach correct Enunciation—Diabetics must be properly dosed.

Hundreds of specialists meet periodically at a Congress for Surgery to listen to lectures of distinguished surgeons on new methods of operation, the results obtained and possible errors and mistakes. But however lucid these lectures may be, they will not enable the members of the audience to perform the operations themselves exactly as described. Even the most accurate verbal account falls short of the convincing clarity of ocular perception. Only a small number of those present ever get the opportunity of seeing the operation performed and even fewer are privileged to acquire practical experience as assistants of a prominent surgeon. This is where cinema photographs prove serviceable. At the Vth International Congress for Scientific Photography and Films it has been proved that excellent films can be made without interfering in the least with the surgeon's work or the patient's comfort.

But here the technical problems of the educational scientific film arise. The bromide of silver of the sensitive negative does not react to colours in the same way as the human eye. The numerous colour contrasts which the eye discerns in the opened abdominal cavity, and which make it possible to distinguish the individual tissues and adipose substances, the blood-vessels and membranes, are not reproduced satisfactorily in pictures where they are seldom more than faintly indicated by the black and white of the film. An otherwise excellent film by Funk-Munkeberg on "Fighting Lupus" showed the difficulties encountered in this respect. Here a wide field is open to the colour film on the improvement of which research workers in many countries are busy experimenting. Germany, too, already has several good systems, but the problem of combining the utmost precision of delineation with exact differentiation of colouring has not yet been solved with complete success anywhere. Professor Bur, of Celestat-Strassbourg, showed a reel where every single one of thousands of pictures had been photographed simultaneously three times; subsequently the three separate series photographed with red, blue and green colour filters were thrown on the screen as one. A German firm built for Professor

But the requisite complicated apparatus, which works with a very high degree of precision and accuracy in the reproduction of colours.

Saying "A"

In the above mentioned cases the shots were taken in ordinary light, however feeble. Difficulties increase when an X-ray film is to be made. X-rays pass through the flesh and adipose tissue as well as through bone and brain, and the physician who has an X-ray picture taken for diagnostic purposes, can only base his conclusions on "shadows" their comparative strength and position. But an educational film by Prof. Zwinner, called "The working of the Vocal Organs", demonstrates how tongue, teeth and lips cooperate in forming the vowels; for instance where the tongue is placed when the letter "A" is pronounced, and again how it presses against the upper row of teeth and recedes in order to produce a "Z". In this and similar cases the dosing of the X-rays require great care, otherwise the lips will completely disappear whereas the whole head must be shown on the screen like a transparent and movable model. To procure this effect different kinds of X-ray lamps must be used in turn.

"Interesting Cases" or Daily Routine?

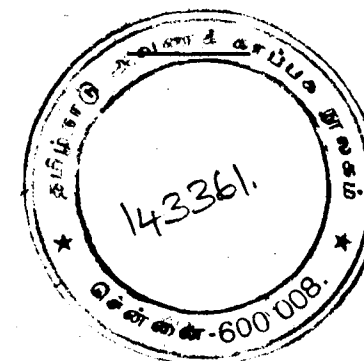
As to the object of educational films, opinions differ considerably in different countries. A German gynaecological film by Dr. Kittler reveals how the medical practitioners experience, looking for possible abdominal tumours, can easily be led astray by certain natural phenomena of the abdomen which in individual cases may assume exaggerated proportion.

Another film produced by the German Medical Body shows the practitioner how, by cutting asunder nervous cords it is possible to prevent atrophy of toes and feet in cases where a pathological irritation of the nerves induces contraction of the respective blood vessels and stops the free circulation of blood in these parts. This film also includes pictures of cases of successful operations where the patients recovered their full working capacity. Thus the practitioner who is confronted with the question of an operation of this description, is enabled by the film and the relative statistics to form an opinion of the chances of recovery for his patient. Films from other countries, on the other hand, showed chiefly unusual operations which are called for comparatively seldom, further reels that referred to various medicinal products and must be properly classified as propaganda for certain industrial concerns. The chairman of the congress, Professor Claoue (France), who himself showed an excellent film on cancer of the breast

spoke most emphatically in favour of the German idea of using medical educational films for the spread of enlightenment on health and hygienic questions, and for furthering professional instruction among practising physicians.

"Digestive Process of a Diabetic".

Here is another subject tackled by a medical film. The patient has retired for the night and is asleep. He suffers, as the spectator is informed, from diabetes. The intention is to demonstrate in the course of the night the process of metabolism, namely, the assimilation of food by the digestion, since the process is of supreme importance for the state of the patient. At first glance the film is confronted with the apparently insoluble problem of presenting something static, the state of the disease, as something dynamic, the action of the disease, which alone will furnish an instructive and interesting picture. The German film "Insulin" has accomplished this by trick sequences. A clock is introduced, marking the progress of time at different stages between diagrams, showing how the sugar contained in food is absorbed by the blood, and is either assimilated or in the case of diabetes is not assimilated. In the same way the effect of an injection of insulin is shown. Finally the physician can see how important it is not only to prescribe the insulin off hand but to dose with utmost accuracy the quantity necessary to convert the sugar and starch not assimilated by the organism of its own free action. The picture also shows how to regulate properly the whole mode of living of the patient suffering from diabetes. (I. R. I. B.)



Wilhelm Filchner, Man of Action.

BY DR. WOLFGANG MEJER.

No one was surprised in Germany at the announcement that Wilhelm Filchner had been among the first to receive the German National Prize. Filchner is regarded both as the most successful and the most popular German explorer of today. During the last years his name had already appeared often in connection with harrowing experiences which had befallen him in the interior of Asia. But even as far back as 1911 when the University of Königsberg conferred upon this young geographer of 34 the unusual distinction of an honorary Doctor's Degree, he had already gone far beyond his own colleagues and was generally recognized as an explorer of extraordinary energy and purpose and with many scientific achievements to his credit.

Filchner had an unusual life even then and one worth mentioning because of its bearing on his later profession as an explorer. Naturally the most important qualification for being successful in this field is an innate ability to lead. Bearing this in mind, there exists an inner relationship between the first profession chosen by Filchner, that of being an army officer, and his later development into one of the greatest of explorers of the world. Filchner was born on September 13, 1877 in Munich and after attending the Gymnasium decided to become an army officer.

As with many other famous explorers, so also did it happen to Filchner—out of one profession, in which they have carried on diligently, better than the average of those of their own age, a certain natural power or driving force comes forward causing them to boldly push onward along unknown ways. In his inspiring speech as rector of St. Andrews University, the famous Fritjof Nansen defined this mysterious power and fascination of exploration: "It is an awakened love of adventure, such as lies dormant in everyone of us. It is the secret desire to do great and daring deeds, to fill one's life with something more than the daily pilgrimage from house to work and from work back home again. It is the eternal urge to conquer dangers and difficulties, to unveil mysteries, to penetrate territories beyond the pale of every day experience.

Such a "Love of adventure" in Nansen's sense motivated the young officer into attempting and accomplishing his first undertaking in

the service of exploration. On May 24, 1900, Filchner set out all alone on a ride over the Pamir. A man with two horses alone on the "roof of the world". He succeeded. Three years later, Filchner, already known as a successful explorer of Asia, was placed at the head of the German China Tibet Expedition and went through the "Central Republic" from Shanghai to Si-ning-fu. He advanced as far as the robber-infested north-east of Tibet. From the spring-fed lakes of Hoangho he marched forward eastwards to the mountains, which are now once again well-known in connection with the latest events in the Far East. The results of this Expedition, undertaken in the years 1903—1905, were made public by Filchner in his comprehensive work, "North-East Tibet" (Nord-Ost Tibet). It was published with the support of the German Kaiser and the State Government and gives in four atlases and several volumes of botanical, zoological, ethnological, physio-magnetical, and topographical contents an impressive testimonial to the work accomplished under the most difficult circumstances imaginable in the heart of Asia. Another book which he wrote about this trip is "Tschung-Kue in the Central Republic" (Tschung-Kue im Reich der Mitte). This is a complete and careful presentation of Chinese culture, and has added greatly to our knowledge and understanding of the life of the Chinese people.

For many years after his China-Tibet Expedition, Filchner remained and worked in his own country. He was connected for a long time with the Trigonometrical Department of the Prussian Land Survey (Landesaufnahme) and the Prussian Main General Staff. A few years later we find him again active in an entirely different part of the globe—Filchner as a Polar explorer! In 1910 he crossed the highest mountain of Spitzbergen on skis. Then he led an expedition to the Antarctic, discovered Prince Regent Luitpold Land and a great ice barrier at the southern border of the Wedell Sea. Suddenly a tremendous flood destroyed the winter station they had built. After that their Expedition ship, "Deutschland", had to take to the open sea so as not to be crushed by ice. Finally the ship was frozen in and forced to drift in the icy darkness of an Antarctic winter. Filchner gives a graphic picture of this journey with its many adventures in his book, "To the Sixth Division of the World" (Zum sechsten Erdteil). Roald Amundsen, the discoverer of the South Pole, knew how to appreciate the unusual ability of the German explorer. He plighted him to take part in an expedition to the North Pole.

Then the World War broke out. Filchner did not go with Amundsen to the North Pole. He served his country instead as an army

captain on the eastern and on the western fronts. At the close of the war he devoted himself primarily to writing. With his book, "Storm over Asia" (Sturm über Asien), he appeared once again as master of prose writing. It attracted a tremendous reading public. A short time after this literary triumph his large, admiring circle of readers and the whole scientific world were surprised and shocked at the sudden news, "Filchner murdered". Anxious weeks passed by. Then came consoling certainty. Filchner was alive but in great danger. In January 1926 he set out once again on a journey and went from Taschkent eastwards through Sin-Kiang and Kan-Su. Ill and destitute, he passed the winter of 1926-27 in the Kumbum Cloister. He had hardly recovered when he resumed his march to Tibet in company with two missionaries, one an Australian named Mathewson, and the other Plymire, an American. After unheard of fatigue in the arid, parching desert, the caravan were held prisoners two long months by Tibetians. Since they had heard absolutely nothing from Filchner, the British Indian Magistracy had almost decided that he had fallen victim to one of the innumerable robber bands that at that time infested every district. In the meanwhile, however, Filchner had succeeded in getting through a call for help to the Viceroy of India. He persuaded the Dalai-Lama to allow Filchner and his guides to continue on their journey. New and unbelievable hardships and exertions awaited the already much-tried band. In dead of winter 1927-28, they crossed the Himalayas. In spite of all the hindrances and delays that accompanied the trip it was rich in scientific gains. Filchner made detailed physical maps of the greatest part of their route of about 6,000 kilometres. In a district almost unknown physiographically, he built 153 earth magnetic stations and made investigations from them. This journey has been made a graphic reality to thousands of people in Filchner's most-read book, "Om mani padme hum". An interesting picture of the rites and the dogmas of the present-day Lama kult is given by Filchner in his book, "Kumbum Dschamba Ling". He has also captured and preserved for posterity many amazing Lama customs in a 22,000 metre film, and has performed in so doing a never-to-be-forgotten service to ethnology. The heart-breaking conditions under which this labour was performed can be imagined in this brief quotation from Filchner: "Thirst caused the greatest torment; my mouth seemed to be glued shut, so dry was it. Each one of us had to watch our companions lest we fell asleep. And on top of everything else my footwear bothered me. Soon we came to a district in which sharp stones were scattered in the sand, and they cut right through my shoe soles. I fell down and could go no farther. We had tramped nearly

60 kilometres in the desert and still no water! We crept forward closely together. To top the climax of misfortune I had broken my right foot a short time before in falling down. It hurt me so much that I could scarcely move."

To be able still to make scientific deductions and observations under such circumstances, and then after undergoing such experiences accompanied with such bodily discomfort and pain to start out once again on a new and dangerous journey for the sake of science, requires the soul of a super-explorer. In spite of serious injury sustained in the last expedition, Filchner started out once again in 1934 on a trip of discovery in the heart of Asia. There he experienced once again years of unheard of hardship and danger. Once again he fell into the hands of fierce Asiatics. Tungusens held him as a prisoner six months long. Now the daring explorer has returned safely to British-India. However, he thinks to return only for a short time to Germany, which has honoured him with the bestowal of the National Prize because of his distinguished service in the furtherance of scientific knowledge. But in the spring of 1938 as soon as he has finished his present work about his last journey, Filchner intends to return to India, untiring in his service in investigating the globe.

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BY PROF. A. RAMA IYER, M. A.

THE CHOICE OF TEXT-BOOKS.

I propose to deal in this lecture with the importance of choosing the right type of reading books. We take it for granted that, after a preliminary course of ear-training and voice-training, we have to start with reading. The right type of reading book for Indian children is something quite different from the right type of reading book for English children. We should not forget this point. When I was at school there were absolutely no readers prepared for foreign children. So the books which I learnt were books written by Englishmen for English children. Why is it that these books are not suited for our children? The English child, when he starts reading, has a decent vocabulary; he has already a command of several hundred words. But, when an Indian child starts reading, he does not know a single English word. Further, the English child is speaking English all the time, while the Indian child has opportunities of speaking English only at school; when he goes home, or when he meets friends outside, he does not use English. So his environment is quite different, and his vocabulary, so far as English is concerned, is *nil* when he starts reading. Therefore, his text-books have to be specially written for him. Now, Tamil has to be taught to our children in the way in which English is taught to English children; but we do not care to do it. What do we do in our schools? We spend a whole year in teaching the letters of the Tamil alphabet! And how many words are introduced into a Tamil Primer? I have seen many primers which do not contain even a hundred useful words. Most of the words are long, rare words; and our children have very few occasions to use such rare words in their language, whether in speech or in writing. If, in the New method English Primer, there can be introduced 220 words, don't you think that a Tamil child, who already knows a few hundred Tamil words when he starts reading, can be taught a few hundred Tamil words before he has finished learning his alphabet? It is the easiest thing in the world. But we seem to think of Tamil as if it were a foreign language to the child. It is his own language; it is his mother tongue, and he knows so many words already. The most rational thing would be to teach him the alphabet with the help of the words which he already knows; not a single word should be introduced into the primer which a normal child is not likely

to understand. And then the order in which these words are introduced is also quite wrong in our Tamil books, because we think of the ease with which the letters can be written. Why should we think of writing at all to start with? We should think only of reading. If we think of reading to start with, we can introduce so many words even in the first lesson, as you will find in an English primer written for English children, because they are all words with which the child is already familiar. With the help of illustrations, the child can be taught the words, and by practice the child learns to read those words. It is not necessary for him to learn each letter of the alphabet separately, to begin with. He could be taught to read the words much more easily than he could be taught to read the letters. I have found this method from my own experience to be much simpler.

All of you will admit, therefore, that the teaching of English reading is something quite different from the teaching of Tamil reading. We want matter which is suited to the age of the child, in a vocabulary which is absolutely simple, a vocabulary composed of the commonest and the simplest English words. By the simplest English words I do not mean only words of one syllable. Many common words are words of two syllables; and words of one syllable are not all simple words. Our aim should be to start with the commonest words as far as possible, but the matter should be not matter suited to infants, but matter suited to children of the age at which they are taught to read English. All this means that we must have special text-books written for our children. As our environment is also quite different from the environment of the English child, the matter which is introduced must have relation to the Indian child's environment, not the English child's environment. But there are many stories which are universally popular, which are liked by children all over the world, for instance, the Arabian Nights. Many of us seem to be under the impression that these are English stories, but they are not. They are stories of a world-wide interest, which are liked by children all over the world. Michael West has proceeded on the principle of introducing as many stories of a world-wide interest as possible, not English stories in particular, because he has prepared his Readers not for Indian children alone but for all foreign children. His Readers are being used now in so many different countries—in India, in China, in Egypt, in Turkey, etc. For this reason, he has as far as possible avoided purely environmental words.

The five chief points to remember in the teaching of reading in a foreign language are set out in Section II of the Synopsis. The first is: *the pupil should from the beginning derive pleasure and a sense of*

power from the study. That means, stories should be introduced as early as possible, stories of a universal interest, because children like stories better than anything else. The words that are taught to the children must be such as will enable them to express a number of ideas. The maximum of expressive power should be the aim. That means, the words should be very carefully chosen and they should be the commonest words. There should be no occasion for the child to unlearn a single word which he has learnt at the beginning. The second chief point is: *new words should be learnt by practice in actual reading situations, not as mere vocabularies.* We find in our Tamil primers single words given without any connected sense. The best way to teach words is to introduce them in actual reading situations, not as mere words; that alone gives a sense of power. The third chief point in the teaching of reading in a foreign language is: *new words should appear at regular intervals, not in a mass.* You would find in many readers that the words are introduced in a mass, not at regular intervals. If you examine a single page of reading matter, you would find some 20 or 30 new words, some of them very rare and difficult words. No foreign child would be able to master so many words at a time. According to West, the number of running words per new word should not be less than 30 in a Primer or 40 in a First Reader. This principle cannot be applied mechanically, but as far as possible this rule should be adhered to. The number of new words in the First Reader is less than in the Primer. Words of low frequency should be as few as possible. Word-frequency lists have been compiled by persons who have devoted years to that work. The most popular, the most authoritative, word-frequency list used at present is that of Thorndike. After a thorough examination of a large and varied literary matter, the words of the English language have been arranged in the order of their frequency. Words of low frequency mean words which are used rarely in writing. They should be as few as possible in children's books. But environment cannot be altogether avoided. For an Indian child, there is no difficulty at all in learning the words, 'elephant', and 'temple'. Although they are of low frequency, we cannot avoid them. But such words should be few and the matter should be suited to the age of the pupil. Very few Indian children of five or six can enjoy English nursery rhymes.

There should be books for *extensive or supplementary reading* to go with the books for *intensive study*, and silent reading should be practised when the supplementary readers are read. At first we must see to it that the child has learnt the correct pronunciations of the single

words and also the correct way of reading connected matter. When I was in the Intermediate Class, I had a teacher who was supposed to be an authority on English pronunciation, but now I know that, though his pronunciations of single words were correct, he did not know how to pronounce words in combination. He would say, for instance, "as far-as-possible," with the same stress on each word. "As far as possible" is a single word-group; so also "bread and butter," "cup and saucer", and so on. Take any sentence that you like, you will find the same kind of thing. Even in dictation, we should not adopt the method of giving out the words of a sentence separately. In dictating to children we should dictate in the natural way, by grouping words. The child never learns to recognise English as spoken naturally, if you dictate the words separately. That the pronunciations of words are modified a great deal in combination with other words is a subtle point, but one which no teacher should neglect. Reading aloud is very necessary in the earliest stages, but, as early as possible, silent reading should be introduced. Michael West's advice is that all the supplementary readers should be read by the pupil silently. Silent reading alone is rapid reading. The eyes pass rapidly over the matter, and you are able to take in the whole matter. You can test the comprehension of the pupils by means of suitable questions. In the early supplementary readers, West himself has given suitable questions to test comprehension. Many of us have not learnt the art of silent reading, even in reading a newspaper. We must learn silent reading ourselves, and we must teach it to our pupils at as early a stage as possible. If we do that, we shall find how easily they are able to cover the whole course in an incredibly short time.

We come now to the principles of Vocabulary Selection. "Word-counts represent almost the first scientific and objective approach to problems of language-study," says Huse in his book, *Psychology of Foreign-Language-Study*. Word-counts have, however, their own limitations, because the word is not the unit of expression. The unit of expression is very often a word group, and so the frequency of the individual words is not a final test. This is a real handicap for those who have to prepare Readers.

I should mention here the latest attempt at a selection of a vocabulary of 2,000 words by a committee of experts. The result of their final labours has not yet been published. But it is a very elaborate investigation that they are engaged in. They have limited themselves to a vocabulary of 2,000 words of maximum efficiency, that is, maximum of expressive power, by means of which they want any one to be

able to express all ordinary thoughts and ideas. It is a work which has been undertaken under the Carnegie Endowment, and those who are at it are West, Ballard, Faucett, and Palmer. When this list of 2,000 words is published in its final form, it is bound to be very useful to students of English all over the world. In the meanwhile, Palmer has prepared a *Thousand-Word English*, and brought out in it a number of story-books for children.

I come now to our haphazard methods of choice of text-books. In my first lecture I used the expression, "selected and controlled vocabulary". A selected vocabulary is quite necessary for the reasons which I have explained. The way in which the words are used must also be carefully controlled by the writer. They should not be used in a haphazard fashion. West and Faucett proceed on the principle that each new word should be used at least in three different reading situations. You find at least three sentences in which every new word is used. And then the way in which the vocabulary is built up is very interesting. The vocabulary must be carefully controlled, so that the maximum of expressive power may be secured. We do not care for these things in our choice of text-books. In many of the books which we now use in our schools, the lessons are not graded within the same reader or from reader to reader. And there is no continuity. The First Reader of one series is used in one class, then the second Reader of another series is used in the next class. We do this on the ground that we have to patronise different publishers. We must have a set of Readers for three or four years—three years being the absolute minimum. Let us not make a change merely for the fun of it, before the whole series has been tried during the period. I have found West's Readers condemned outright by many schools; but I say they never had a fair chance, because the principles of the course were never understood by the teachers. I have had talks with some of those teachers, who have not minded confessing that they never tried to understand West's principles. They never knew that West proceeded on principles which were different from the principles on which other writers of text-books proceeded, in spite of the fact that in every one of his Readers West has explained his principles. The Composition Book and the Supplementary Readers were never used at all!

In our schools, there are no separate books for intensive study and for extensive reading. The so-called non-detailed study has been dispensed with now, and we think that the detailed study of a text-book of less than a hundred pages is all that a high school pupil can do in the course of a whole year. As a matter of fact, if English were taught

on proper lines in the earlier classes, you would find that a pupil in the V or VI Form can very easily read and master three or four times as much as he is called upon to do now.

Our Anglo-Tamil Primers should be given up at any cost, because they do not teach the language; they teach the vernacular equivalents of English words and English sentences, and nothing more. They lead us into the delusion that we are learning English, when actually they give no practice in the use of English.

Finally, books for beginners should be written by Englishmen who know the problems relating to the study of English as a foreign language. Many of us have a superstitious veneration for an Englishman. An Englishman's pronunciation, we think, is the last word on the matter. Do we think that *any* Tamilian is an authority on Tamil pronunciation? Then why do we imagine that any Englishman, simply because he is an Englishman, is an authority on English pronunciation? He is no authority on correct English either, simply because he is an Englishman. Why, then, do I say that books for beginners should be written by Englishmen? No Indian, however learned, can express simple ideas in simple, everyday English,—especially, when he has to confine himself to a limited vocabulary of a few hundred words. A newspaper critic who thought it was his duty to take me to task for expressing this view that books for beginners should be written by Englishmen, has quoted the examples of Gandhi and Tagore to confute me. Well, if you mention Tagore, close down all your schools and colleges; he never went to school. And so with Gandhi; no school taught him his English. Let us not think of extraordinary men; let us think of the normal child. Moreover, I never said that Indians could not become writers of good English. We are now trying to consider the way in which the language should be taught to the normal child who goes to school. Englishmen alone are capable of writing books using simple, idiomatic, everyday English. You will find that, in books written by Indians, there is always something roundabout and outlandish in the way in which ordinary ideas are expressed. Would we admit that any Englishman could write Tamil Readers for our children? The subtleties of Tamil can never be mastered by a foreigner. With due deference to all our masters of the English language, I maintain that they do not know how to express simple ideas in simple, idiomatic English. The English that they have learnt is literary English; it is not the kind of English which should be used in children's books. (The lecturer then read out a whole play from *Seven Little Plays*, written with the help of the 500 odd words used in Michael West's *New Method Readers Book I*.)

Gleanings

A MUSLIM SCHOOL FOR GIRLS IN MOROCCO.*

The El-Hajeb Muslim school for girls was opened on the 1st of October 1932. It was in the nature of an educational experiment: the attempt was to be made to teach the girls of a small town in Morocco the rudiments of the French language, while giving them an education appropriate to their environment, in hygiene, housewifery, and native arts and crafts. The school has won the confidence of the rural aristocracy of the neighbourhood and the other classes of society have followed the example of the chiefs, so that the school has about a hundred pupils.

The curriculum includes the following subjects: language and recitation, reading and writing, mothercraft, hygiene and care of the sick, arithmetic, character training, drawing, weaving and preparation of the wool, embroidery, needlework, mending, ironing, cooking, domestic science. Berber is the mother-tongue of the pupils.

Drawing is taught as a preparation to weaving. The pupils endeavour to draw the patterns found in the woven fabric of the tribe of Beni-M'tir. This prepares them to understand the art of the tribe; the patterns of other tribes, pertaining to a different type of art, are ignored. European taste, for instance in the choice of colours, plays no part. Weaving is the main occupation of the Beni-M'tir women; it brings both comfort and art into their tents: for a woman to be a good weaver stamps her as distinguished, intelligent and well-educated. Therefore weaving takes the first place in school. The wool used is prepared in the school, from the fleece to the finished article, burnous or carpet. Beni-M'tir women cannot sew; the girls are learning at school to make most of their clothes.

The school is a home for the pupils, the life of the tribe flows through it. The school mistress's part is to become acquainted with that life and to prepare the pupils for it. She has come to learn rather than to teach. She knows how to show her appreciation of the Berber civilisation. Every school, as every country, has a local civilisation and a peculiar angle of evolution with which it is wise for the outsider to get acquainted at once. The characteristic of the El-Hajeb school is to draw from the environment all the resources necessary to the life of the school. It is rather difficult for the foreigner who speaks another language and belongs to another environment to understand the spirit of a tribe. In art only does this spirit appear in a concrete and intelligible form. Thus to make a local art, sedulously cultivated, the pivot of the teaching and of the life of the school, is the surest way of being true to its characteristic, not to mention the many other advantages of a school with a

professional bias. To teach that art is to understand the needs of a civilisation. Education must fulfil those needs rather than create new ones; new needs are and must be the result of an internal evolution. To teach that art is also to train character specifically, by inculcating respect for traditions, respect for all those things which being the outcome of a climate, of a past, of a race are the truth for that particular time and place.

It is a woman of the tribe, an expert in the art of weaving, who directs the work, but she has had it pointed out to her that the discipline of the school is not her affair; that she must derive her prestige solely from her knowledge of her art.

A post-school section has as its aim the promotion of weaving among the former pupils of the school by selling their work, either through exhibitions of weaving or to visitors of the school.

THE WARDHA SCHEME.

Professor Krishnnayya, in his address, made the following reference to the scheme of elementary education propounded at Wardha under the auspices of Mahatma Gandhi: "Before leaving this subject it is necessary to make a special reference to some of the features of the unique scheme emerging from Wardha. I expect it will be examined by some of your members and I should not forestall discussion. From what I have said already it must be evident that I believe making our education more practical is a desirable goal, and that teaching pupils for a period a day some useful line of work is quite laudable; but one cannot be so sure that 'the whole of the general education should come (or can come) through the crafts and simultaneously with their progress.' The teacher who can manage this in the secondary school must be a *rara avis* indeed. Even in the primary school this has been found difficult. Not less challenging to one's imagination are the claims made for the possible achievements of this child of the new age. Next regarding self-support, there is room to feel that schooling may become commercial and may take on a mercantile atmosphere and that exploitation with a view to securing maximum self-support may become dangerously possible. The burden of supporting education should rest rather on the parent and the public than on the slender shoulders of innocent children. The idea of finding through the work of seven classes enough sales-proceeds should be well worth experimenting with. Gandhiji is more an Eastern fable than a man and his life and work sound like belated chapters of the Arabian Nights. He has succeeded where others have failed and there is so much that is idealistic in the scheme that a trial on a small scale in a selected area and in the most favourable circumstances like that given to prohibition in Madras or to passive resistance in South Africa would be tremendously worth while prior to a nation-wide advocacy or adoption."

Progress of Education.

*Information Service of the International Bureau of Education.

Notes

BY PROF. C. A. KRISHNAMURTHI RAO, M.A., F.R., ECON.S.
ASSOCIATE EDITOR.

Students' Strikes.

OF late, the tendency on the part of students to go on strike has shown itself to be on the increase. It is to be seen in schools and colleges. The reasons seem to be sometimes grave; sometimes trivial. In certain places, ministers had to intervene. The youth of India has been noted for its docility.

But, possibly, it is a sign of the times, that the youth of the country has taken to new methods of self-expression and action. But what is of greater importance is whether the strikes can be justified or approved of. In certain cases, particularly of High Schools, detention of some students from appearing for public examinations has been the cause. A challenge to authority particularly in educational discipline is inconsistent with ideas governing the relation of the teachers and the taught. But so far as the Andhra University students are concerned, they are moved by a spirit of self-preservation. The best solution for the recurrence of such a trouble in any form seems to be with the authorities in avoiding all possibilities of such a situation arising, by foresight and a clear conciliatory attitude.

Teachers' Strikes.

Even more surprising and regrettable are the circumstances that have compelled certain teachers to go on strike as they have been landed in a position of utter helplessness and despair owing to non-payment of salaries for months together! And yet, the teachers are the builders of the nation! Every body is aware of such conditions and yet, even the Congress Ministry has not seen its way to terminating such a sad state of affairs. Is it any wonder that teachers should grow so desperate? The machinery of the Government works in a novel manner on such occasions. Such schools are threatened with dissolution owing to mismanagement. Is it the fault of the teachers? From long sustained agony the teachers are led to the prospect of bank-

ruptcy and unemployment. The remedy is worse than the disease!

Inefficient Schools.

The Government has come out with its mind made up regarding the fate of these unfortunate schools. The reason is that they are inefficient as their poor strength would indicate. The grounds on which such a conclusion is based cannot sufficiently justify such a course when the cry is for more and more education and education on an extended basis. Any school is better than none in any place. If the Government is unable to give financial aid to such institutions let them bring it down or dole out in proportion to the strength of these institutions. But let them not kill them outright. Here, as elsewhere, the case is that of the rich getting richer and the poor becoming poorer. The poor schools should be encouraged. Poverty is no crime and is not incompatible with efficiency. It is one of the strongest weapons in the armoury of the socialists that the burgoise and the upper classes tyrannise over the poor. The spirit of the times is for the elevation of the poor and poor schools are among them. Such a policy is particularly unfortunate when it operates against elementary schools. It is tragic to be told that a small number in a school is an indication of inefficiency. Honours classes in particular groups would have to be closed down for the reason of small numbers. The point to be considered is whether the schools are efficient really, whatever their strength might be, because it is a variable and fluctuating factor. Moreover, the normal or average parent-public and many among the teachers themselves are unable to follow the numerous and often unconnected policies and changes introduced in the world of education by the leaders, ministries, and Departments of Education.

The Medium of the Mother-tongue in Collèges.

A lively discussion ensued in the Academic Council of the Madras University on the 17th of February 1938 when a resolution was moved recommending the same by one of its members. It was pointed out by some among them that while the principle underlying the proposition was acceptable, the colleges can take up the policy only when all the High Schools

have prepared the ground by a wholesale adoption of the same. But the truth seems to be that those schools which have not yet taken to the system have not done so because of the "domination of the University" which aims at a high standard in English which, in the opinion of many, can be attained only by providing for the students as many opportunities for using English as possible beyond the usual English hour. The colleges are in a better position to inaugurate the policy by making a beginning in subjects like History, Economics and Logic.

Reviews.

1. The Coronation English Readers: Edited by J. C. Rollo, M. A., Published by B. G. Paul & Co., Madras. Books, II, III and IV—Price: As. 8, 10 and 12 respectively.

These neatly got-up books form a continuation of the series we had reviewed already, which follow the same aims and principles of teaching English to Indian pupils. Book II contains carefully graded lessons dealing with familiar subjects and introducing pupils to common words and expressions easily intelligible to them. A small beginning has also been made in elementary grammar and composition work. Book III elaborates the grammar and composition work of Book II. The vocabulary is extended and the lessons seek to introduce the young reader to the use of simple and idiomatic English. The Indian background is kept up to interest the pupils. Book IV, while extending his knowledge of vocabulary and idiom still further, gives pronunciation notes and warning against common grammatical errors. The lessons deal with a variety of matter interesting to readers and unobtrusively didactic in tone, and give a decent grounding to them in the use of correct spoken and written English.

All the Readers reveal great care and up-to-dateness of teaching methods. The exercises at the end of each lesson are sufficiently exhaustive and give opportunities for impressive drill in the principles of correct usage and grammar. The books are aptly illustrated and attractively printed. The list of words at the beginning of each lesson and the appendix at the end of each book form other useful features. The series will be found suitable for use in the lower forms of schools.

2. New Study Readers: By H. Martin, M. A., (Oxon), O.B.E. Published by K. & J. Cooper, Bombay.

Primer As. 5, Book I As. 7, Book II As. 9, Book III As. 12, Book IV As. 14, Book V Re. 1.

This is a new series of English Readers by an experienced teacher of English who needs no introduction. The books have been carefully planned

to teach Indian pupils to speak and write correct English by effective, modern methods. The matter in each has been graded and of varied interest, and written in simple direct English. Dialogues form one of their special features, which are intended to familiarise children with spoken English. The notes and exercises following each lesson in Books II to V have been intelligently framed and would prove helpful aids in the understanding of the subject matter, and in grammar and composition work. The Primer and Book I have been done with special care so as to afford opportunities for practice which would lead to the easy acquisition by beginners of common words and their usage. Illustrations are profuse, apt, and neat. The get-up of the whole series is quite good.

3. The Southern Continents and North America: By Eva D. Birdseye. Published by Macmillan & Co., Ltd., Madras. Price As. 14.

The book under review covers the latest syllabus of Form IV, for which it is adapted as a text book. The regional system of treatment has been followed, and the inter-relation between man and his environment has been clearly brought out with suitable pictures. Suggestions for practical work following each lesson and the numerous sketch maps and diagrams used to illustrate the contents, would be bound of value to pupils.

4. Food, Clothing and Shelter: Series of Geographical Texts by L. McD. Robison. Published by Macmillan & Co., Ltd., Madras.

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Book III Growers and Distributors Price: Re. 1.
Book IV Manufacturers and Explorers Price: Re. 1.

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The above continue the series of geographical books written on a novel and intelligent plan combining the teaching and the learning side. The contents profusely illustrated with pictures and maps, while making interesting reading, would tend to help pupils to apply their knowledge to associate with life problems. The subject has been dealt with from a human standpoint, emphasis being 'laid on pupils' outdoor and observation work. Suggestions for practical work have been given at the end of every lesson. Revision exercises based on the new method have been included. All the books have been attractively printed in bold type.

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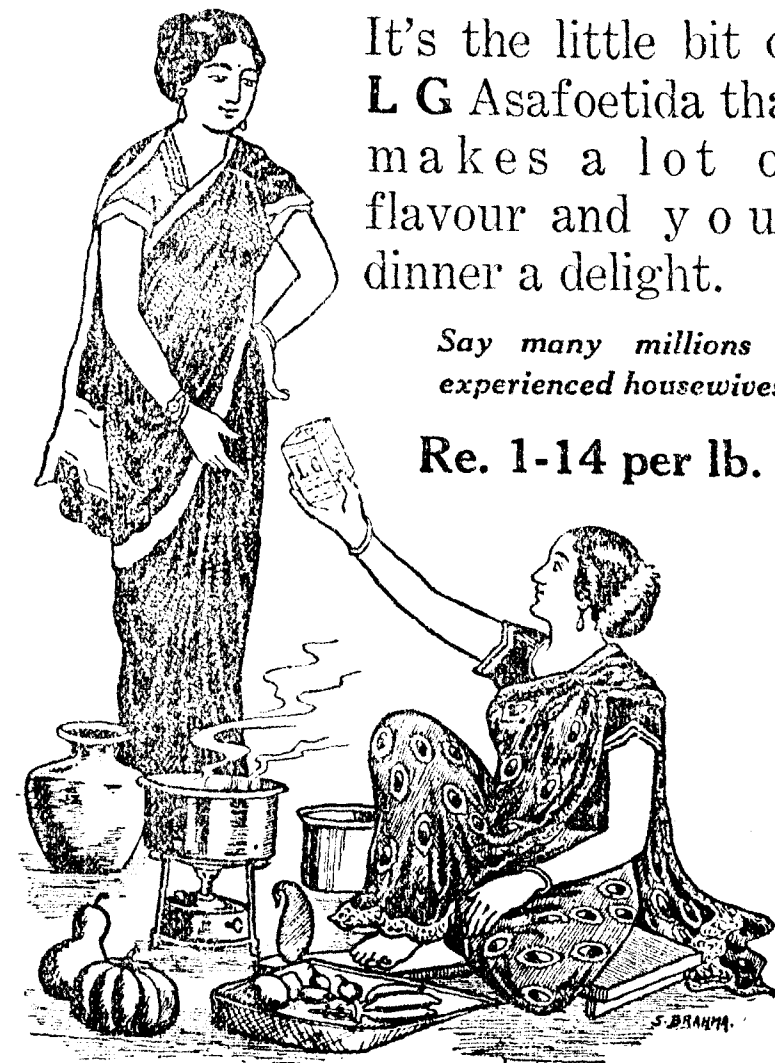
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