

THE INDIAN EDUCATOR

VOL - XL - NO. 2

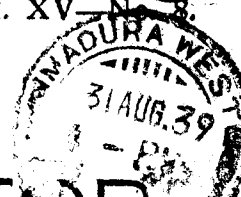
August 1959

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REG. NO. M. 2027.

Vol. XV—N. 8.



THE INDIAN EDUCATOR



AUGUST, 1939.



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THE
INDIAN EDUCATOR

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

Vol. XV.

MADURA: AUGUST, 1939.

No. 8.

Values vs. Shibboleths in Indian Education.

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

The Jesuits used to say that if they were given the task of educating the child they would answer for the man. This is just what we do not remember or realise in India today. The complaint in the West is that in the nursery schools and the Kindergarten classes the children are bright and alert and charming and free while in the Elementary and Secondary Schools they become drilled and spiritless and full of futility and frustration. In India there is no such gulf because we have only futility and frustration right through from the beginning to the end. Even in the West the medium has not found between license and slavishness. Here we have not risen above slavishness at all. All education from the beginning to the end must harmonise independence and interdependence, self-realisation and co-operation, self-assertion and self-control.

But in India in my generation as well as even today we have neither had the one nor the other nor both. The inferiority complex has been burnt into us. We never knew or know what it is to act in a spirit of self-direction, and to display initiative and sense of responsibility. Dr. Maria Montessori has said well; "The child who has never learned to act alone, to direct his own actions, to govern his will, grows into an adult who is easily led and must always lean on others. The school child, being continually discouraged and scolded, ends by acquiring that mixture of distrust of his own powers and of fear, which is called shyness and which later, in the grown man, takes the form of discouragement and submissiveness, of incapacity to put up the slightest moral resistance. The obedience which is expected of a child both in the home and in the school — an obedience admitting neither of reason nor of justice — prepares the man to be docile to blind forces. The

punishment, so common in schools, which consists in subjecting the culprit to public reprimand and is almost tantamount to the torture of the pillory, fills the soul with a crazy unreasoning fear of public opinion, even an opinion manifestly unjust and false. In the midst of these adaptations and many others which set up a permanent inferiority complex, is born the spirit of devotion — not to say idolatry — to the *condottieri*, the leaders." The famous educationist is not condemning here leadership and obedience but unreasoning obedience to irrational leadership. Can we not trace the source of modern Dictatorships there in such educational seed? What is needed is the voluntary obedience of a disciplined self-regulated mind to a leader who focusses the wills of all and whose will itself is a self-regulated and disciplined power. My first bitter feeling is that we are not given any lessons in freedom and self-government in our schools. And we are supposed to be fit to build the free self-governing Indian democracy of today and tomorrow. Mr. Aldous Huxley says well; "You cannot reach a given historical objective by walking in the opposite direction. If your goal is liberty and democracy, then you must teach people the arts of being free and of governing themselves. If you teach them instead the arts of bullying and passive obedience, then you will not achieve the liberty and democracy at which you are aiming. Good ends cannot be achieved by inappropriate means. The truth is infinitely obvious. Nevertheless we refuse to act upon it. That is why we find ourselves in our present predicament."

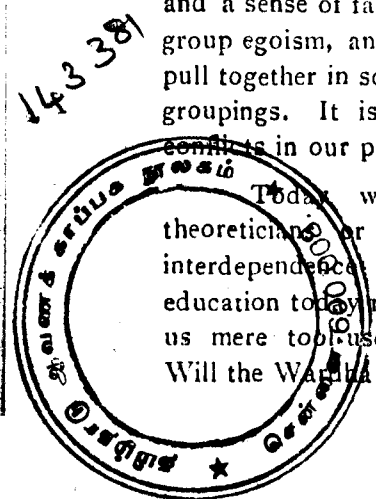
Thus Indian education contains no elements of freedom and self-government. Nor does it contain the element of real and joyous interdependence. We must maximise the feeling of fellowship in schools if we are to realise communal amity in adult life. It is no doubt true that the modern games develop the team spirit and other good qualities such as endurance and courage and a respect of the rules of the game and a sense of fair play. But they can be used also as instruments of group egoism, and desire for success by any means. We must learn to pull together in schools unmindful of our caste groupings or religious groupings. It is that mentality that will put an end to communal

conflicts in our polity.

Today we are manufacturing only parrots or pedants or theoreticians or so-called specialists. Neither independence nor interdependence is an objective in education or in life. Academic education today makes us mere tonguesters; technical education makes us mere tool-users. My generation was a generation of tongue-users. Will the Wardha system of education make us mere tool-users? No

one today seems to visualise life as a sum total of values—individual, racial, ethical and spiritual. I like the Wardha system because it will enable us to know our place in life and fill it whereas the present system is only a factory of the unemployed and the unemployable. The Talmud says; "He who does not teach his son a trade virtually teaches him to steal". Today we are not taught a trade and we are too good or proud to steal. So we beg or starve. Education should be academic and technical, and should stimulate independence and interdependence. Every one should have the elements of art and religion. But the Wardha system does not care for that ideal. Every one should know to live and should live to know. But the silly modern system of education in India does not care for that ideal. We must combine many values and discard our present slavery to some silly shibboleth or other. Take for instance the shibboleth about games. Why should not congregational prayer or a concert or theatrical develop team spirit as much as football or cricket? They will do so and also train and purify our emotions. Religion, especially, seems to be taboo today. Mr. Aldous Huxley says: "Religion is, among many other things, a system of education, by means of which human beings may train themselves, first, to make desirable changes in their own personalities, and, at one remove, in society, and, in the second place, to heighten consciousness and so establish more adequate relations between themselves and the universe of which they are parts" And yet Religion which is itself a system of education has no part in the present scheme of Indian Education or the impending Wardha scheme. Religion alone gives the necessary rationale and sanction and reward for inhibition leading to self-control and self-abnegation. It gives us the means of transforming the negative virtue of non-attachment into the positive bliss of God-attachment—of fellowship with God and with Man through God.

Thus we want a new type of education in India hereafter if we want new values in individual life and in social life. We have suffered much from the tyranny of old shibboleths and we seem to be replacing it by the super-tyranny of new shibboleths. Let us overthrow such tyranny of shibboleths and have a sweet and gentle and divine sovereignty of values.



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Leaves from My Diary

II

Dissemination of Sound Sex Knowledge.

By PROF. SHYAMNANDAN SAHAYA, M.A., M. Ed., F.R.E.S.

It was evening. The sun had set. The crescent moon, pale and wan, now and then slipped among the vagabond clouds and then a thin darkness mantled the earth. There was a slight chill in the early February breeze. It was at such an hour that I set out for a walk. While I was crossing the Dak Bungalow Road at Patna some familiar voice called out my name and I paused. I turned towards it and was soon face to face with the Raja of Surajpura—an enlightened and highly educated landlord of Bihar, who enjoys, in the world of Hindi literature, considerable literary reputation. He escorted me into "Harnivas" a palatial building. Both of us sat in a well-furnished drawing room, and no sooner had I made myself comfortable, he asked me, "Why on earth should you be talking about sex so much? You have been, these few months, aiming at disseminating sound sex knowledge. How can you be sure that the knowledge of sex that you impart to young men and young women will be sound?"

These questions of his had already been levelled at us by a number of the critics of the Marriage Reform League — an organisation that had made a lot of stir in Bihar and U. P. and which had been founded by a few of us, at the suggestion of Mr. J. P. Narayan, blessed by Rashtrapati Rajendra Prasad, mentioned favourably by men like Pandit H. N. Kunjru, Mr. K. Natarajan and Dr. S. Sinha, and encouraged and sympathised by the well-known journals of Northern India. The foremost of these critics were Munshi Ishwar Saran of Allahabad and the late Rai Bahadur Dwarka Nath, the veteran Senator and Syndic of Patna University. And what I had said to these gentlemen and others who corresponded with me or wrote in the press I said also to the Raja. I told him:

"Well, I am not surprised to find you horrified at the mention of that tabooed word 'sex'. You do not belong to a small community of men in this respect. A large number of people with the pretensions of education revile us for talking about 'sex'. But we are neither ashamed nor afraid of it. In fact, we have carried it a little too far. We have just organised The Eccentric Club, the objects of which are to take good tea and to talk about sex and civilisation. We do all this because

we believe in the extreme importance of that word and of all that it stands for. Has not ignorance or misunderstanding of sex led to disastrous consequences? Have not numerous lives been wrecked and promising careers blasted because of the errors of 'Sex'? Whenever life has been driven on by that formidable impulse along misguided lines according to ideas drawn from wrong sources, it has ended in a tragedy. Your life, mine, everybody's, bears witness to it. Doesn't it? Repressed by parents and teachers many boys and girls quench their curiosity by picking up information at wrong places. Then they feed their minds on morbid thoughts and give a practical shape to these and when these errors lead to abnormal phenomena, they are horrified when their confidants, at once stupid and not unoften wicked, tell them that they suffer from dirty and incurable diseases. Upon these they brood, day and night, and rush for quack remedies, thus damaging their bodies and minds, not unoften for ever. If such be the case, why should we not talk about Sex? Why should we not think of disseminating sound sex knowledge?"

"Yes, so far you are right," returned the Raja Saheb, and continued, "but how can you be sure that the knowledge you disseminate would be sound?"

I said, "Well, I was just going to answer this question, too. I have not forgotten it, and before I had really said a word, I was reinforced by a new arrival, another member of the League. I smiled and felt heartened with this new accession of strength. But without running into irrelevance, I began: "Well, we have a Board of Advisers, consisting of one of the foremost physicians of the province, an eminent psychologist and a number of students of sex psychology and physiology. With the help of these we would publish small pamphlets and articles in the press and arrange lectures by competent outsiders. We would also, when our funds permit, set up a small library of selected authorities on sex and distribute a syllabus of sex books to advanced students. In these ways we hope to raise a well-informed set of parents and teachers and youths, who would escape many of the direst consequences of sex-ignorance."

"And," added my friend, as soon as I had finished "then you will have a new generation of young men and young women who would willingly shoulder all the responsibilities of life and would neither be crushed nor demoralized by the storm and stress of adolescence, and will find their feet strong enough to resist the assaults of surging emotions."

For a while it appeared to me that my friend's eloquence had silenced the critic, who was obviously gathering up his ideas for another question. But unfortunately the horn of a car in the portico called him out, and within a couple of minutes, we two found ourselves again breathing fresh air.

An Adult Education Scheme.

The part that Secondary Schools may play in the removal of illiteracy.

By SRI GAURI PRASANNA BISWAS, M. A., B. T.

The India of to-day is not the India of a few decades ago. With the inauguration of a new constitution in which the voice of the people counts for a great deal, the political consciousness of the people has been awakened to some extent. But it is not mass consciousness that it should be. It is in fact, a consciousness not still well-defined, of a bare and fortunate tenth of the entire population. Hence with the nine-tenths of the illiterate mass, India can hardly hope to satisfy her political aspirations or introduce much-needed reforms in her social system. India with her culture and traditions still dazzling the eyes of the upstart west presents a very disheartening picture when the literacy of her adult population is compared with that of other countries of the world. All her resources and man-power are lying waste in the pitch darkness of a tropical jungle. India has ever been the Eldorado of peoples that know how to make the most of her situation. When opportunities do come to us to rehabilitate, the ogre of frivolous factions intervene to set back the hands of the clock of progress. It is why the removal of illiteracy should loom large before every one. It is in this direction that teachers and students, favourably circumstanced as they are in an educational atmosphere, can play a great part through their associations, schools and colleges, not only during the vacations but also in after school hours.

History provides an ample and heartening example of what teachers and students can achieve in the all-important task of liquidating illiteracy in the countryside by organising themselves into a compact body with this noble aim in view. China has been regenerated after an opiate slumber of years by her patriotic students and teachers through mass education in their leisure hours. The Soviet Govt. in Russia has brought up the percentage of literacy from 20 to 85 in the last two

decades. The present day arrogance of militant Japan has its source in the compulsory Primary Education and mass enlightenment and all efforts, government and popular, had been heading to this happy culmination since 1869 only, the commencement of the Meiji Era *i. e.*, a period of 60 to 70 years—a man's life time. The Philipinos, no one knew where they were in the scale of literacy, with no tradition at their back since the world's birth, have attained a high percentage of literacy within 12 years under the lead of Dr. Frank Laubach, an American missionary and international authority on Adult Education.

What has been so far done in India in this direction was sporadic and popular and some stray cases of initiatives taken by Govt. officials with the co-operation of non-officials. We cannot read any co-ordination or system in them. Specially when the move is made by a Govt. official, work goes on vigorously for sometime, but with the transfer of the official all enthusiasm evaporates. Some sort of legislation or a well-planned country-wide organisation has to be made to put the move on a sounder basis. I should like to suggest a scheme as follows:—

(i) Every High English, Middle English school and Madrasah should have at least one Adult school with population of 25—30 adults, aged 15—45, attached to it.

(ii) The Adult school should be held at night for an hour and a half.

(iii) It should be under the supervision of the Headmaster.

(iv) The teachers of the school and boys of the upper class should act as instructors—one instructor per night.

The turn of a teacher or student may fall only once in a month and thus will never clash with the boys' private study or teachers' private affairs.

(v) The Instructors will go through some training for a few days for their instructional work. Method of teaching boys and adults differ since their mental make-up differs. The adults have maturer brains and a wider knowledge, though not systematised, of things. Experience has taught that adults learn a thing in one-fifth the time a child would require to learn it. Without entering into some essential details it may safely be said that a teacher should have some training here also.

(vi) The Instructors may use the teaching apparatus and rooms of their school.

(vii) Each adult will require about eight to ten annas for his book and slate, pencil etc.—the total cost amounting to Rs. 15 per year.

(viii) Rs. 2 for oil consumption per month in the night class.

(ix) The Adult class should sit for an hour and a half or two hours with three periods as follows,—

(A) 1st period—30 minutes: Some amusing but instructive story. The adults with their hundred and one worries and physical exhaustion after the day's labour should be attracted through such a make-believe.

(B) 2nd period—1 hour: Teaching of alphabets through Dr. Laubach's Key-Word Method as illustrated in "Parer Boi" by Mr. Bilash Mukherjee, M. A. and Mrs. Latika Mukherjee, B. A. of the Bengal Adult Education Association. I would quote a few lines from a report of the Bengal Adult Education Association in elucidation of the method.

"In every language about a thousand words could be picked up which may be termed as "Basic words." A child of 10 or 12 or an illiterate villager has a stock of vocabulary which does not very much exceed 12 or 15 hundred words and these could be included in the "basic words" chosen.

The next step is to choose about a dozen such words by elimination, transposition or by combination of vowel-endings. These are the key words. Out of just one word, if carefully chosen, at least 30 to 40 words could be formed and so with about a dozen key words the whole lot of basic-words could be learnt.

The chief advantage is that a child or an adult is not made to run the whole gamut of the puzzling 4 dozen letters first, as is usually the practice, the child tearing half a dozen *shishushiksha* and that in four valuable months, yet not learning half the number. Teachers may recall that the same method of "word wholes" and the gradual introduction of letters is followed by Dr. West in his New Method Primer, the first lesson being words formed out of the combination of I, S & T. Repetition of letters learnt and the gradual accretion of two or three through words—that is the prominent feature of such a method. It ensures (i) less time (ii) steady progress (iii) self-confidence and the joy of acquisition in the beginner and (iv) less trouble to the teacher. Teachers for Adult Education centres opened by A. H. Quraishi, I. C. S., S. D. O., Sirajganj, are being trained in this method at the Sirajganj training camp and its operation has been watched and found successful in the village centres.

But conservatism dies hard. Educationists may give the method a fair trial.

(C) 3rd Period—20—30 minutes: Some talks on Hygiene, Sanitation, Agriculture and Industry, Co-operation, Toleration, Vote, Govt. etc. As Dr. Shyamaprasad Mukherjee emphasised the other day in the University Institute, the village people should be given not only a modicum of literacy but also some general knowledge regarding health and hygiene so that they may live a better life. This may be done by touring Jatra and Cinema parties and other agencies.

(x) The Adult School attached to the H. E. and M. E. School should continue for 2 years and the adult unfortunates will have attained at the end of the course, sufficient ability to read story books and newspapers, write their own letters and follow simple accounts in paper.

Barring M. E. Schools and Madrasahs, their number not being at hand, if we take into account, 1500 H. E. Schools which may start one Adult School each with only 25 adults on the roll, we may give literacy to about 40,000 in a year and to about 4,00,000 in ten years. We may have 10 times that number literate at a modest computation if M. E. Schools and Madrasahs make a common cause. If no other agencies take up the work, we, teachers and students, may make illiteracy a thing of the past in some areas at least by 1950.

Now, who is to set the ball rolling? The Department of Education has control over about 600 schools (H. E.) and colleges. If these set the example at the instance of the Department, private enterprise will follow. The District Boards and Union Boards should come forward with some financial help.

An annual grant of Rs. 50/- per school may be more than sufficient for the upkeep of an adult school.

This is but a rough and ready outline of a nation-building scheme which, we teachers who have been flattered time and again as nation-builders from different platforms, can formulate and press upon the authorities for consideration.

If education is diffused, and I am sure it shall be, and if the father is literate, he will hardly allow his child to be illiterate. The demand for more education and the greater outturn of more literate people will improve the position of educational institutions and will favourably react on the position of teachers. A teacher cannot expect due consideration paid to his status in a ten-per-cent literate country. Let us do something practical and patriotic in our own humble way with the minimum of labour, and public opinion will veer round.

School Uniform

By SRI V. V. DIVEKAR, B. A., B. T.

The Government of Bombay has been busy considering various schemes for the improvement of the education now being imparted in the different schools of the province; and sometime back I had an occasion to refer to the educational programme of the Govt. of Bombay in this Journal. The attention of the Govt. has also been drawn to the necessity of having a uniform to be worn by all the school-going children of the province. But so long no provincial Govt. dared to suggest any improvement in the dress worn by the school-going pupils for the simple reason that it might wound the religious susceptibilities of the people and that it might lead to some misunderstanding. In all foreign countries, school-going children are expected to wear a uniform and they have derived all the benefits accruing therefrom. The Govt. of Assam was the first to take an initiative in this matter. They appointed a Committee to go into the curricula to be followed in the schools and this Committee in the course of its report recommended that a school uniform was a necessity as it led to several advantages. This suggestion has also been now accepted by the Govt. of Bombay who have now circularised all the heads of Secondary Schools in the Province recommending the use of a common uniform. No doubt in spite of the good intentions of the Govt. several people have read bad meaning into this new departure of the Bombay Govt. Some days back a letter appeared in the 'Times of India' wherein the writer, himself a Mohamman, complained that Mohamman religious sentiments would be wounded by asking or making the students wear a dress which keeps the lower part of the body exposed to public view. This was objected to by the writer as being opposed to their religious sentiment. But this argument does not seem to hold water as the writer's arguments are not supported by any of his co-religionists. In our own school Mohamman students have raised no objection to the dress so far.

Now let us consider the possible advantages of wearing this uniform. When different kinds of dress are worn by different students of different communities it helps to keep alive in their minds their own distinctions and differences. Not only that, the rich men wear quite a different kind of dress from those who are poor. But thanks to the new innovation the rich and the poor will be dressed alike hereafter, and it will be very difficult for one to distinguish the rich from the poor and also the Christians from the Mohamman students. The Circular issued by

the Public Relations Officer of the Govt. of Bombay says "The vast variety of the forms of clothing which we in this country are accustomed to find worn by children in all stages attending one and the same school in a locality help to keep alive distinctions and differences in a stage of life where common education, common games and other common activities should be undertaken in an atmosphere of oneness and close brotherhood."

The greatest advantage derived by children wearing the same uniform is that all look upon each other as brothers forgetting their slight differences and this in the long run is bound to redound to the benefit of the students in the beginning and the nation in the long run. The other advantages derived by wearing this kind of uniform are (1) cheapness (2) neatness and (3) grandeur.

This uniform certainly costs less than what a dhoti, a shirt, a coat and a cap used to cost before. Secondly, apart from cheapness, when all the students are dressed in a uniform and in the same fashion it gives a very good appearance and the sight too is very imposing. The students appear smart, neat and tidy. Indirectly, we shall have instilled into their young and impressionable minds the idea of cleanliness as students wearing the same dress will by comparison feel ashamed of wearing dirty clothes.

In short, the school Uniform will be a 'Great Leveller' and a corrector of the mentality of the present day students and there is no doubt that the school Uniform will go a long way in improving the mental outlook of students in all possible ways, and now when the defence of the motherland looms large before the public this step of the Govt. may be considered to be in the right direction, on account of its manifold advantages.

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Methods of Teaching.

By PROF. N. KUPPUSWAMI AIYANGAR, M. A., L. T.

It has been said that "Half of the misunderstandings and futile controversies in actual life arise from the ambiguity in the use of words." But the whole of the controversy about teaching the whole of Arithmetic through spinning or about teaching the whole of geometry through carpentry arose out of the fact that the opposite sides used the words "teaching through" in two different senses. To the student of education, 'teaching through spinning' means making the pupil learn in the course of spinning. Not only that. The piece of knowledge must be necessary for efficient spinning but the pupil must learn it through his experience in spinning. For instance if a pupil learns through his own experience that one kind of cotton gives finer yarn than another he is said to have learnt this fact through spinning. If the pupils learn through his experience that the relation between the weight and the length of the yarn gives a unit for measuring the fineness of the yarn spun he is said to have learnt this fact through spinning. But if the pupils learn to find the area under cultivation of cotton, the thing may be *connected* with spinning but no educationist will say that the pupil is learning to find area *through* spinning. To the educationist it is one thing to say that the whole arithmetic can be taught *through* spinning, and it is altogether a different thing to say that the whole of Arithmetic can in some way be integrally *related* to spinning. The report of the Zakir Hussain Committee as well as the conference resolution are quite clear on the point. They do not talk of teaching everything through spinning. They say that everything "should, *as far as possible*, be integrally *related* to the central handicraft chosen." Italics are mine and they indicate the real meaning behind the scheme. Therefore educationists need not be perturbed if some enthusiasts of the scheme make no difference between '*teaching* through spinning' and 'integrally related to spinning."

Secondly, we must be quite clear as to what exactly the critics mean by the term 'the whole of arithmetic' when they ask the question "Can you teach the whole of Arithmetic through spinning?" If by the term "the whole of arithmetic", we mean the whole of the arithmetic that is now taught in our schools, the question is irrelevant. A good deal of the arithmetic that is now taught in our schools need not be taught at all in any school. If the term means that arithmetic that is useful for an average educated citizen, the question is unnecessary.

Mathematics touches life at so many points that you cannot confine yourself to only one aspect of life — the craft. In the objectives given by the Committee under mathematics, "problems arising in connection with his craft" occupies only a small part of the whole. Problems connected with the pupils' home and community life, business practice and Book-keeping form an important part of the curriculum. There is also the mathematics that is necessary for the proper understanding of some of the contents given under 'Social Studies', 'General Science' and Drawing. Therefore what is contemplated in the scheme is not that the whole of arithmetic could be taught through spinning but a good deal can be connected with spinning and the rest with the physical and the social environments of the pupil. No educationist can take any exception to this.

Technique of the methods of teaching.

The report says that problems in mathematics should supply ample opportunity for the development of the reasoning capacities of the pupils. It is also stated that this education of the reasoning capacity is to be done by making the pupil learn the *why and wherefore* of every process. But nothing is said in the report as to how this learning of the why and wherefore is to take place. This is so, I think, partly because any detailed description of method did not form part of the work of the Committee and partly because they should have thought that it was unnecessary. Every teacher ought to know. But experience shows that few teachers really understand the method* though it is preached incessantly in training institutions. Therefore, I think, it is not out of place if I say something about how this 'why and wherefore' should be learnt if we want to train the mind of the pupil.

Just as everything else, the why and wherefore of anything can be learnt in two ways. (1) The teacher explains and the pupil learns. The master spinner explains why you should spin in a particular fashion and the pupil learns the reason. This may be called the Dogmatic Method. Mathematics in the past failed to train the reasoning powers of its student because it was taught in this way. Pupils were made to memorise definitions, postulates and proofs in geometry in the hope that it would improve in some magical manner their reasoning powers. It was not realised that pupils do not learn to reason by merely memorising even understandingly the process of reasoning adopted, say, by Euclid.

* This was corroborated by the question put by one of the Inspector of Schools. He thought that the Heuristic Method was applicable only to science subjects and wanted to know how it can be applied to mathematics!

Here the pupil is only a passive recipient of knowledge. He is not an active participator in his own education. In the words of Dewey, "Passivity is the opposite of thought, it is not only a sign of failure to call out judgment and personal understanding, but it also dulls curiosity, generates mind wandering, and causes learning to be a task instead of a delight."

(2) The second method is to make the pupil an active enquirer and discoverer of knowledge. This is what is called the Heuristic Method.

The maxims 'Practice makes perfect' and 'learn to do by doing' are applicable not only to physical activities but to intellectual activities as well. 'The Direct method' is applicable not only to the learning of a language but also to thinking. If you want the pupil to learn to think, you must set him to think and not give him the product of your thinking. How to do it is the question. Even for lazy pupils it serves no useful purpose to say, 'Think for yourself', 'use your brains', etc. It is absurd to say this to a pupil who is genuinely trying to think out the solution. The teacher certainly must help. Otherwise there is no meaning in having a teacher. Therefore, the real question is what form this help should take.

It is easy to say that the help should take the form of suitable questions, suggestions and occasionally of direct telling. But it is not so easy to find out what questions etc., are suitable. As a general rule it may be said: 'Give the minimum amount of help; 'Do not tell anything which the boy can find out for himself; 'Avoid leading questions; let the questions be such as require real thinking on the part of the pupil to find answers for'. Too little help arrests thinking and leads to discouragement and waste. Too much help is of course against the spirit of the method.

False heuristic methods:—It is a common experience that these instructions are not sufficient for the ordinary teacher. The following method of questioning to teach the solution of problems in Arithmetic is only too common. The questions will show the nature of the problem.

- T. What is the C. P. of one bag of rice? Pupil looks it up in the problem and says Rs. 9.
- T. How many bags did he buy? P. 250.
- T. What is total C. P. of 250 bags? P. Rs. 250.
- T. The railway charges amount to? P. Rs. 320.

- T. What do the other expenses amount to? P. Rs. 80.
- T. Therefore what is the total outlay? P. Rs. 2650.
- T. How many measures of rice are there in a bag? P. 50.
- T. How many bags are there to sell? P. 250.
- T. How many measures are there in the 250 bags? P. 12500.
- T. What is S. P. of one measure? P. 4 annas.
- T. What is S. P. of 12500 measures? P. Rs. 3125.
- T. What is total outlay we have found? P. Rs. 2650.
- T. Therefore what is the profit? P. Rs. 475.
- T. On Rs. 2650 he gets a profit of Rs. 475. Therefore what is his profit on Rs. 100? P. Rs. $(475/2650) \times 100$.
- T. What is his profit percent? P. $17\frac{49}{53}$

When you read the questions and answers without spending any time for the 'looking up' and calculations, the absurdity of the whole thing is patent. It might even seem to an outsider that the matter is exaggerated. It may be that one teacher omits a question here or adds a question there. But every teacher would recognise that there is absolutely no exaggeration in saying that this is the general tenor of the questions that are usually put in our schools.

In fact, very few teachers till about a few years ago, saw anything wrong in it. The candidates for The Trained Teachers Certificate Examination again and again asked me what was wrong with it — They never told anything to the pupil; they were always putting questions; all the answers were 'elicited' from the pupils. They did not see that there was practically no difference between this and the teacher's writing out the solution on the blackboard just as it is given in text books without all the ado at eliciting. Not only in teaching problems but also in teaching pupils to discover general principles, the heuristic method often degenerates into a form of questioning which is worthless from the point of view of helping pupils to think.

If the heuristic method is properly and skilfully used, it transcends all others in the matter of achieving all the aims of mathematics teaching. It not only teaches the pupil to think but, by making the pupil gain knowledge by his own efforts, makes the knowledge real and significant from every point of view, though the method was first talked about in connection that real independent discovery was not possible for the young mind even in the sciences. As I have already pointed

out, it is only in mathematics the young people can feel from the beginning the exhilarating effect of independent thinking. In fact, the heuristic method, in a sense, is not a method but an attitude. Anyway it is not a separate method. It is the essence of all methods. Any method that keeps up the attitude of making the pupils do, think and discover for themselves is heuristic. Induction, deduction, the laboratory method, the project method, analyses and even synthesis, in all these, the attitude may be heuristic or dogmatic. The teacher may follow the arrangement suggested by these methods but at every stage may tell the pupils what to do, what to see and what to conclude. On the other hand, at every stage he may leave the pupil to find out things for himself interfering only when the need for help arises. Too many teachers think that they are not talking. I remember to have read somewhere that the essence of wooing consists in making oneself indispensable to one's beloved. But in teaching, it is exactly the opposite. A good teacher makes the pupils do without him.

It cannot be too much emphasised that unless we follow the Heuristic method of procedure in learning not only the craft but also everything else in the curriculum, the educational value of the scheme is Nil.

I shall conclude with an example to show how, even in the lower classes, pupils can be made to discover and formulate general principles and rules of procedure.

Long division is generally supposed to be the most difficult of the fundamental operations that have to be taught in the lower classes. It is so because pupils are taught the rule in a purely mechanical manner. Do-as-I-tell-you-to-do-work. So much so that even graduates are unable to see the rational—the why and wherefore—of the process. But if we set about it in the right manner, it would not at all be difficult even for the 4th cl. boy (3rd in the Wardha Scheme) to discover and formulate the rule.

Begin with making a pupil divide 3 as. among 2 pupils. When the pupil had given an anna piece to each, how to divide the remaining one anna is the problem. Pupils may find it difficult to see that hundreds should be split into tens and tens into ones, but very few even in the second class find difficulty in seeing that the anna has to be changed. Thus the pupils have a first glimpse of the general principle that we first divide the highest denominate no. as such and when there is not enough to go round, we change them into the next denomination and divide.

By gradually increasing the number of items and repeating the actual concrete division and by making the other pupils observe and

describe what the distributing pupil does, the boys themselves can be made to formulate the rule that at first they divide rupees as such, then change the remaining rupees into annas and divide the annas as such and if anything remains change them into pies and so on.

Now they are ready to take up division with ordinary numbers that cannot be done by a direct application of the multiplication table, e. g., $84 \div 4$ and $64 \div 4$. By analogy with Rs. 8—4 as. 4 and Rs. 6—4 as. 4, and with the help of bags of ten and loose cowries, the rule that we first divide the tens as such, and that the remaining no. of tens and the four ones are taken together as 24 ones and then divided as ones, is developed by giving plenty of examples. The introduction of divisors with more than two digits or dividends with more than two digits involves no new principle. Thus we see that even in the matter of the most difficult of the four operations, it is possible to make young pupils discover and formulate general rules.

Teaching without Tears

By DR. G. S. KRISHNAYYA, M. A., Ph. D.

Parodying Scott's lines about an experience not more universal, one might truly ask,

"Breathes there the teacher with eyes so blind
Who never to himself hath pined,
'This is a dull and naughty class'?"

The rhetorical question does not call for the services of a statistician! Which teacher has not noticed children looking listless, casting their eyes around for distraction, waiting to be delivered into temptation, yawning, coughing, getting fidgety and appearing obviously bored? Who has not found pupils doing poor work enduring their lessons instead of enjoying them, listening when they ought to be doing, and shrinking into sullen non-cooperation at a time when under a different regime they might have been expanding in a creative self-activity? Who has not been annoyed by classes where disorder and indiscipline reign supreme, where energy worthy of a better cause is wasted, where absence, unpunctuality and obstruction are daily phenomena, where the devil's workshops are as numerous as the idle heads present? Who has not felt the futility of grand plans, much preparation and Job's patience or the sense of defeat and disappointment in the face of genuine effort and great expectation? Misfortunes such as these are reckoned amongst the ills that pedagogical flesh is heir to. But why is it that pupils are

careless, troublesome, unwilling to work, and unresponsive alike to lofty ideals and patient effort?

SEEING WORTH OF WORK.

Children come to school with questions claiming answers, problems needing solution, longings calling for satisfaction, experiences demanding interpretation. And what do they get in the name of education? They get either what appears to them entirely irrelevant to their *felt* needs or what seems totally unconnected with their past. Small wonder then that pupils exhibit such scant appreciation of their teachers' toils. When the child is enabled to see sufficient reason for doing what has to be done, when he can appreciate its value to him personally, when his effort seems directed to meet some definite demand of his being, he begins to feel that school work has worth for him. No child has been known to refuse to do a thing which appeared personally satisfying and significant.

Why are children so ready to memorise hundreds of lines of Shakespeare with an entertainment programme in view when they refuse to learn a much smaller number for repeating in the class? Why is Geography easier to teach when it grows out of excursions to the post office, the bazaar and the railway station than when it is confined to the pages of the text book? The things which they must learn become focal in the consciousness of the pupils because they are relevant and necessary in meeting actual needs.

MOTIVATED TEACHING.

The successful teacher is successful because he is able to get his pupils to recognise the value of the work being done or being assigned. Having succeeded here, he can be sure that the work of itself will command attention and supply the effort which achieves. The problem of most schools may be stated as 'How to get pupils to want to do what they ought to do' and this is exactly where motivation comes in. It is the means of securing needed urge for the realization of maximum accomplishment along certain desired lines.

The highest forms of effort flow freely in response to ideas of relevancy and worth. This is not a superficial enthusiasm resulting from the teacher's charming personality, or from his vivacious manner and powers of expression, or from an admiration for his learning, although these are all valuable assets. It is a deep-seated, enduring enthusiasm born of the pupil's conviction of the value he will gain from the mastery of his work. In such an atmosphere of genuine enthusiasm, difficulties vanish, results are obtained and victories are won. It is in the white

heat of such an engrossing enthusiasm, that hard problems are solved, immortal poetry is written, great music is composed, eloquent orations are delivered and epoch-making discussions are conducted. This it is which renders conditions favourable for doing that which ordinarily would be unthinkable. It makes possible the impossible. For teacher and taught it converts a job into an adventure!

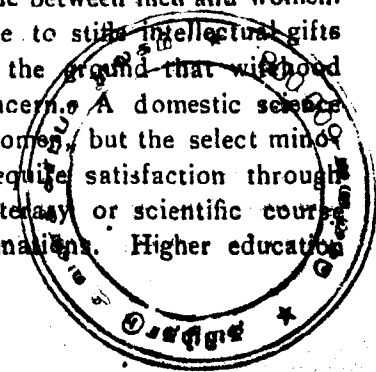
Let pupils once taste the joy of such achievement and the problems of rowdiness, indifference, unwillingness to work and the like will become things of the distant and happily forgotten past.

The Women of New India

The Inaugural Address of the Literary and Debating Society of Sarah Tucker College for Girls, Palamcottah, was delivered by Begum Mir Amiruddin (wife of the District and Sessions Judge, Tinnevely.) In the course of her address, Begum Amiruddin observed as follows:—

"You young women even more than the young men are the makers of New India. The country's hopes and aspirations centre upon you, for the training of the future generations is your sphere, whether it be as mothers or professional teachers. In regard to the higher education of women, some are still sufficiently die-hard to hold that College education is redundant for women as marriage alone should be their goal. The home, no doubt, must form the bedrock of the career of the majority of girls, but we demur to the assertion that domesticity alone should be the sphere of all and women should not be permitted to choose any other vocation. Even girls who are intended for a domestic career should, in my opinion, be allowed unfettered scope to pursue higher studies if they are intellectually suited for the same. I am one of those who believe in the desirability of closing the portals of the University on all boys and girls who are physically and intellectually unfit to enter them. But I would allow unhampered development of their faculties to both boys and girls when they are gifted with intellect. No discrimination in regard to this matter should be made between men and women. In the interests of humanity it will be unwise to stifle intellectual gifts when they are found in a woman, merely on the ground that widowhood and motherhood alone should be her concern. A domestic science course may be suitable for the majority of women, but the select minority who have instincts and powers that require satisfaction through scholarship may be permitted to pursue a literary or scientific course in consonance with their aptitudes and inclinations. Higher education

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sharpens one's intellect and equips one better to discharge one's duties as a citizen than otherwise. Moreover, an enlightened woman usually transmits her culture to her children.

There is no gainsaying the fact that whatever else girls are taught, they should be well-equipped to meet the practical every-day duties that enter the modern home-life. But I am inclined to think that too much is made of the home-complex for women. It is often forgotten that woman has also a mental content and is not merely the cook, nurse, drudge and mother; and the fact is distressingly overlooked in India that man does not need only a 'housefrau' but also an intelligent friend, a comrade with whom he can share his thoughts and that the wider a woman's outlook, the better will the home be. At a time when Indian women are entering a new world and when the need for women of high culture and ability is becoming increasingly manifest, girls endowed with intellect should not lose the opportunity of pursuing an academic course. This country is more and more in need of not only men but also of women endowed with knowledge—knowledge which will stimulate one's mind, quicken one's imagination, widen one's vision and give one courage, light and wisdom to add to the glory of the nation and the happiness of a sorely-stricken world. I therefore hope that girls for these parts will fully avail themselves of the facility afforded to them to prosecute higher studies.

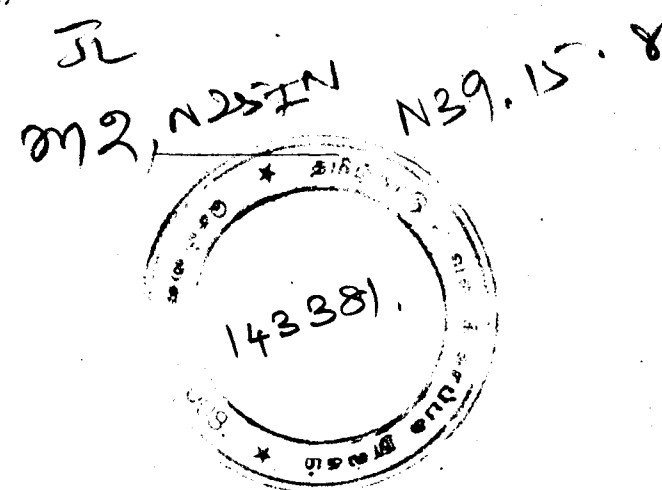
It is gratifying to find that at the present epoch, Indian women have risen from the torpor of centuries. They are growing alive to the fact that they have personalities of their own, the horizon of their outlook has been extended and the range of their activities has widened. Indian women are to be found now in the different professions—educational, medical, legal etc. In the neighbouring province of Travancore, a woman fills the high office of a Surgeon-General and another woman discharges the duties of a Munsif. Indian women have also entered the arena of the political movement. There are at present 60 women legislators in the land, in the U. P. a woman adorns the Ministerial Chair and there are women Deputy Speakers in a number of provinces. So far as women's political advance is concerned, India ranks to-day third in the world, coming next only to the U. S. A. and Russia. Women are demanding legal rights of inheritance, equitable laws and other reforms.

This awakening among women has caused a stir in the ranks of the men, who express the fear that women's emancipation is but a prelude to the disruption of the home and the rapid invasion of men's jobs.

But such fears are mere delusions, for the Oriental woman is remarkable for the strength of her domestic sentiments. Moreover, conditions in India are different from those prevalent in Great Britain. In the latter country, it is the excess of the female population over the male that makes it necessary for the majority of women to seek jobs; in India, however, the proportion of men to women is almost equal and marriage is bound to govern the career of the majority of girls.

To-day the Indian woman stands at the threshold of her career. Behind her are noble traditions fraught with lessons, before her are the coming centuries pregnant with possibilities to be made her own. In directing the steps of progress, the modern educated girl must remember that she must be a steadfast, level-headed creature, who, while being conscious of her rights and responsibilities as a citizen, is also not heedless of her duties towards her home; who, while not being too sedate, can still enjoy life without overdoing the craze for amusements and a 'good time'; who, while not being in seclusion, can still boast of her traditional modesty, grace and gentleness. Moreover, she has to bear in mind that equality does not signify antagonism between the sexes and that true liberty does not deteriorate into license. However insistent may be the cry of woman for equality, she must not overlook the fact that co-operation and not competition must adjust human relations. The modern Indian girl must never lose her sense of proportion and balance, she must never run the gamut of extremes and go to absurd lengths in the mimicry of men, always remembering that only when she will maintain her equilibrium and eschew excesses that woman's cause will gain strength.

(Specially contributed by Begum Mir Amiruddin, B. A. (Hons.), for the journal.)



Vocational Bias to Education in India

By SRI K. NARAYANAN, M. A., S. T. C.

A. Need.

1. Educational futility.

The charge-sheet against the present system of education is that it is book-centred and examination-ridden. It has produced an army of educated unemployed men and women. It does not train individuals to become useful members of society, able to pull their own weight and participate effectively in its work. Vocational bias to education will serve as a happy departure from a trail of educational futility.

2. Economic development.

Work done formerly by unskilled labour is now done by machinery. Skilled labour is, therefore, vitally necessary. Again the deplorable wastage in the physical and social resources of the country has to be stopped. For the huge economic and human wastage universally found in this country vocational education is the only solution.

B. Some Recent Experiments in India.

1. Bombay Scheme.

The Joshi Committee on Vocational Education suggested a seven Years' Primary course of 'Basic Education'. Recently the Bombay Government has decided to start 200 schools on Wardha lines.

In accordance with the its general scheme for the reorganisation of Secondary Education, the Government has converted five of its high schools into Junior Vocational schools this month. Instruction in these schools will impart a vocational bias up to Standard IV on a background of general education, and specialisation in vocational subjects with some general education in Standard V to VII. The intention is that these schools should serve a dual purpose, i. e., it should be possible for a boy, on the completion of the course, either to seek employment, or to proceed with his vocational education by obtaining admission to professional colleges, or to the University diplomas in technical subjects, his school-leaving certificate being expected to be recognised by the University to be equivalent to the Matriculation. The scheme receives a considerable support from a parallel and recent proposal of the British Consultative Committee on Secondary Education to institute 'technical high schools'. The British proposal was directed to redress the disproportion in the distribution of brain power as between

the professional and industrial worlds. This welcome objective, we hope, animates the Bombay decision.

U. P. Drive.

An army of 2000 trained teachers are ready to go out in the districts of the province to impart instruction to pupils in handicrafts such as spinning, weaving, gardening, agriculture, carpentry, etc., and also music,

The Wardha Scheme of Education with some modifications to suit local conditions has been incorporated in the Basic Scheme of Education now being given a trial. The principle of educating children through purposeful creative activity leading on to productive work is sound on educational and psychological grounds.

In Delhi. (Ingraham Institute, Ghaziabad, 15 miles from Delhi.)

Work has a large place in the programme of Ingraham. Manual arts are important in the school. Instruction is given in book-binding, tailoring, shoe-making, carpentry and rug-weaving.

In Hyderabad.

H. E. H. the Nizam's Government are proceeding apace with the work of giving effect to the proposals formulated by Mr. A. Abbott for the expansion and reorganisation of vocational education in the States. Two new courses, an Electrical Trades Course and a Commercial Course, have been introduced in the Osmania Technical College and the scheme of reorganising the two government industrial schools at Aurangabad and Nizamabad has been taken in hand. In addition to these schools the Government has opened four new vocational schools in Hyderabad, Gulbarga, Warrangal, and Nanded. The next stage of the programme is the establishment of vocational high schools at Kottagudam so as to cater to the need for trained personnel, in the Singareni Collieries situated close by.

In Madras.

Coming nearer home, we have the Ramakrishna Mission House, Mylapore, Madras. Subjects taught are weaving, carpentry, cane-work, knitting, tailoring, etc.

C. Some suggestions for the development of Vocational Education.

1. The only sound basis for an efficient system of vocational training is a sound system of general education. The Vocational High School should succeed the Lower Secondary School (unlike what is contemplated in the scheme formulated by the Mysore Committee in

1936) and be based on it, and should further be parallel to the higher secondary school extending over three years. Technical Colleges should be established. To be successful vocational training requires expensive equipment. It seems obvious, therefore, that resources should not be dissipated, but should, as far as possible, be concentrated in separate institutions designed for the purpose. Moreover pupils may be tempted by the bait of somewhat superficial and desultory vocational training to prolong unconsciously their literary studies and thereby to drift aimlessly into paths which are unsuitable to them.

2. Pupils should be *diverted* to 'separate' vocational institutions after the lower secondary stage of general education. Vocational courses should be such as to give ample scope and opportunities for the development of the practical aptitudes of the pupils. In other words pupils should be diverted to vocations in which they have a living interest. John Adams calls this "the tendencial way of treating vocations". Burt has shown that there is a very definite relationship between 'uncongenial employment and juvenile delinquency'.

3. Any planning of vocational education, Mr. Abbott, joint author of the report on Vocational Education in India, told the Royal Society of Arts the other day, demands that accurate information shall be available as to the precise educational needs—both qualitative and quantitative—of industry and commerce, if waste of time, effort and money are to be avoided. A precondition of success is the establishment of machinery for effective consultation between industry and commerce on the one hand and educational organisations on the other. For this purpose Mr. Abbott suggests the formation of advisory councils—national, provincial and local. Local requirements will have to be carefully considered in organising technical and industrial schools. "The real advisory body," Mr. Abbott says, "would include representatives of industry and commerce, of education, and of public administration. The business would contribute their knowledge of the educational requirements of industry and commerce, the educational representatives, their knowledge of the possibilities and limitations of schools; and the official element, their acquaintance with administration and finance."

4. For the success of any scheme of vocational education it is essential that a Special Publication Bureau should be constituted for the preparation of books and appliances for the use of teachers and pupils.

5. National institutes of agriculture and industry must be established to conduct research. It is interesting to note that the Central

Education Board, China, recently recommended the establishment of such research institutes for the development of vocational education in industry and agriculture.

6. The Government should secure employment for technically and educationally qualified hands. In this connection it is pleasant to note that in Hyderabad State an Employment Bureau has lately been established under the Department of Technical and Vocational Education, in order to secure employment for technically and educationally qualified seekers of employment in the State. The Bureau corresponds with various government departments and industrial concerns in the State to secure employment for qualified hands. Provincial governments and other States must establish similar Employment Bureaus.

D. Conclusion.

To sum up, Vocational bias to education should be given because of the educational futility of the present system, educated unemployment, and an eager desire to utilise to the fullest the natural resources of the country. It is highly refreshing to note that India is now keenly engaged in a Vocational Education Drive. The writer fervently hopes that the suggestions given above will be given the consideration they deserve.

Scientific Education and Research in Egypt

The Conduct of Experimental Work.

By DR. HASSAN SADEK BEY

Director General of the Department of Survey and Mines.

Egyptian children get their first dose of scientific education at the primary school—quite early enough. There they are given simple and elementary scientific explanations of phenomena they usually knock against in their daily lives. When they go up to the secondary schools our boys and girls are given regular courses of science, more especially those who intend to proceed further to some of the technical and scientific faculties of our university.

Until about ten years ago instruction was given on scientific subjects in English or French, but now all is given in Arabic, and this has given birth to quite an important Arabic science literature. There is now no want of elementary books on sciences like chemistry, physics,

botany, zoology, and geology, which were almost entirely lacking a few years ago. Indeed, our Arabic science books have already found their way to other Arabic-speaking countries, from Iraq on the east to Morocco on the west. Even the Azhar University, which is principally a religious institution, has become alive to the importance of science training to help a better understanding of theological subjects.

Our new Egyptian University, in spite of being in its infancy, if compared with the universities of Europe, already possesses the usual number of faculties in such universities—art, science, engineering, medicine, economics, etc. The faculty of science is by no means the least important, and is run more or less on the lines of most science faculties in English universities. Among the teaching staff are men—Egyptians and foreigners—who have distinguished themselves during their years of study and to whose names are recorded important works of research. They are exerting every effort to turn out the proper type of young Egyptian scientist to suit the requirements of the country, thereby making it less and less necessary to send our young men to Europe for their scientific training.

It is, however, to be regretted that, that important faculty has not so far received the consideration it rightly deserves at the hands of the power that be. For, while its sister faculties have all been comfortably installed in palatial buildings round the central university buildings at Giza, the faculty of science has still to spend many more years in the tumble-down old buildings which once served as the stables and store-rooms of the Zaafaran Palace. We are looking forward, and we hope we won't have to wait very long, to seeing the laboratories and lecture rooms of this faculty take their proper place in the university at Giza.

PLENTY OF WORK FOR GRADUATES.

Once graduated, the science student in Egypt should not remain idle, for both in the Government and outside it there is ample provision for scientific work. The Government scientific institutions, as would be expected, are all intended to carry out investigations on subjects which have a practical bearing on one or other of the country's problems.

The Nile, being the most important source of life to the country, naturally calls for a special organisation to study it. This is undertaken by the Hydrological Section of the Physical Service of the Ministry of Public Works. Gauges are registered from 150 or more stations, distributed on the river from its sources in the equatorial

lakes to near its mouths in the Mediterranean Sea. Rainfall observations from over 900 stations in Egypt, the Sudan, Central Africa and many of the islands in the north and south give the necessary data for the forecast of river discharges, which are the basis for drawing up cultivation programmes. One of the most important publications made by that service is "The Nile Basin", which is the reference book for all that concerns the river. The Helwan Astronomical Observatory is an important section of the same service, always busily engaged in astronomical photography, observations of solar radiation, time observation, and recording earth tremors.

THE COTTON RESEARCH BOARD.

The Ministry of Agriculture has a number of scientific and technical sections, which are fast turning out results of researches, most of which are of far-reaching importance for agricultural life of the country. The Cotton Research Board, which was founded in 1919 to co-ordinate and direct all researches on cotton, has now become the link between various administrations involved in cotton problems. The chemical section concerns itself with the study of soils and suitable fertilisers for the various kinds of crops; while the botanical section, with its laboratories and experimental farms, takes upon itself the improvement of the cotton and wheat crops. This is achieved by breeding better and purer types, on the basis of field selection combined with self-fertilisation and hybridisation, or by acclimatisation of imported varieties. Such varieties of cotton as Giza 7 and Giza 12 are the result of the scientific and well-conducted efforts of this section, and have greatly benefited the Egyptian cultivator. The propagation of such improved strains is usually made in conjunction with the State Domains Department and with some selected farmers.

Then we have the Mycological Section, which carries out research on the diseases of plants, finding methods of prevention and control. The Entomological Section studies both injurious and beneficial insects, and is more especially concerned with cotton pests, locusts, aphids, etc. The section possesses an important collection of Egyptian insects.

The Ministry of Public Health is also in possession of many sections conducting important scientific research, bacteriological, pathological, and chemical. Perhaps one of the most important is the Research Institution and Epidemic Diseases Hospital, which was instituted in 1931, and is carrying out most important research on bilharzia, ankylostoma, malaria, filaria, and such endemic diseases, which are the worst enemies of the Egyptian fellah.

Other institutions, like the Geological museum of the Survey Department and the Chemical Department of the Ministry of Commerce and Industry, are engaged in research on subjects both of academic and economic importance. All these sections and departments of State issue from time to time through the Government press bulletins and memoirs embodying the results of researches made, while the illustrations are usually made by the Reproduction Section of the Survey Department.

THE EGYPTIAN INSTITUTE.

Among the non-governmental scientific institutions the Egyptian Institute—"L'Institut d'Egypte"—is perhaps the oldest of all. It was founded by the French Expedition which came with Bonaparte, and was revived in 1859 by Jomard and other French men of science and arts in Alexandria. In January 1880, however, the institute moved to Cairo, where it now functions. Its principal object is to study all that concerns Egypt and neighbouring countries from the literary, artistic, and scientific points of view. Its active membership is restricted at 50, with a similar number of honorary members and corresponding members. Its proceedings are published in yearly bulletins, while important subjects are dealt with in special memoirs. It has an important library of its own, containing about 40000 books, some of which are valuable manuscripts.

The Royal Geographical Society was founded in 1875 by khedivial decree. It has its own buildings and library, as well as an Ethnographical Museum and an excellent show of relief maps of important features in the Nile valley. This society, like all other scientific institutions, lives mainly on the subsidy granted by the Egyptian Government, but it has had the honour and advantage of being particularly favoured both by the late King Fouad and by H. M. King Farouk. Both their Majesties have been generous in their pecuniary help, without which the society's important publications could not have seen the light.

The Entomological Society was founded in 1907, but did not assume importance until the late King Fouad took it under his royal patronage in 1923. It now possesses its own fine building, which houses a lecture hall and offices, as well as a very important collection of Egyptian insects.

The Egyptian Horticultural Society, founded in 1915, is another society possessing an experimental garden. It publishes a special bulletin of its own twice a year. Among its achievements are the shows it organises, which are among the most successful and popular

events of the season. Other societies are the French Archaeological Institution, Cairo Scientific Society, the Ophthalmological Society, and the Egyptian Medical Association, all of which are engaged in fulfilling the scientific needs of those concerned with their activities.

Finally, there is the Royal Agricultural Society, which was founded in 1898 with the object of improving and developing agriculture in Egypt and to organise agricultural and industrial shows. Soon after it was founded it took on itself the distribution of fertilisers in the country, thereby making a good deal of money. Later it gradually formed its technical sections, which carry out independent research work and laboratory studies on the growth of plants, production and distribution of seeds, etc. Maarad cotton and Maarad Hindi wheat are among the most important results of its work. (M. G. C.)

Gleanings.

How to Strengthen Democracy Manifesto of New Education Fellowship

[The Council of the English New Education Fellowship have published a manifesto in which they state that, in view of the critical international situation, they felt it imperative, as representatives of democratic education, to issue a call to united action.]

What can we educators do ?

We must press for an educational system which shall be fully democratic.

We must conduct our educational institutions in such a manner that the democratic ideal is experienced directly as a way of living.

We must make co-operation a day-by-day reality, giving each individual a feeling of responsibility for the whole and a share in determining the common life of himself and his fellows.

We must foster the habit of independent thought and expression of opinion.

We must seek to establish the method of discussion and persuasion rather than compulsion.

We must accept as a matter of course respect for the individual conscience.

But such an education is possible and appropriate only in a democratic society. The fate of Democracy is therefore a first and immediate concern of educationists.

Notes.

TEACHERS AND ELECTIONS

The Recent G. O. and Communication.

By PROF. C. A. KRISHNAMURTHI RAO, M.A., F.R. ECON. S.,
Associate Editor.

Numerous and wide-spread protests have been made against the recent G. O. and communication incorporating certain new features in Rule 15 of the Madras Grant-in-aid Code. The following points in the same merit attention:—

First, a teacher shall not stand as a candidate, or interfere, or use his influence any way, or do anything in aid or obstruction of any candidate in an election to a legislature constituted under the Government of India Act or that of 1935 or to a local authority, nor shall he take part in, or subscribe in aid of, any electioneering organisation.

Secondly, if he is qualified to vote at such an election, he might do so but avoid as far as possible giving any indication of the manner of his disposing of it.

Thirdly, the Manager of a school may be required by the Director to dispense with the services of a teacher or any other employed in the school who contravenes the provisions of this rule. Failure to do this shall render the school liable to forfeiture of Government grant.

After reading the G. O. and notification, one is tempted to ask first — what was or is the necessity or justification for such an order? The Government must have had one of the following objects in view — to protect any aggrieved party; or keep teachers from going astray; or to protect themselves at impending elections. In any case, the notification is purposeless and not at all necessary. No party has suffered till now from teachers' participation at elections; teachers have not by any act of theirs, allowed their work or professional dignity

to suffer; nor is the position of the present Government such as to necessitate such precautions.

The repercussions of the present step adopted by the Government fall under two heads — first, on the teaching profession and next on the authorities including the managements, the Department and the Government. The immediate effect on the teachers has been one of bitter and deep disappointment over such a disfranchising order of the Government. We do not know what has been the fate of teachers in other Congress-governed provinces. There is a universal feeling that a grievous wrong has been done to them without their ever having been ambitious in any way. The poor teacher has not felt strong enough to lift his eyes even to a membership of the local Panchayat Board; how can he think of a seat in the Legislature? If a better-placed teacher aspires for the place, why should he not tread the path that the present Minister of Education has trodden, of which fact the profession as a whole is justly proud?

Forbidding interference or influence in any way so as to aid or obstruct, or subscribing to any electioneering organisation, might disclose intimate acquaintance with electioneering details as practised by others but certainly not by the poor teacher. If others,—for instance, managements,—are suspected, let the missile be directed against them. There is no meaning in harassing the teacher who is already miserably servile and subordinate to so many factors. There are certain inescapable cases where the teacher cannot be neutral as when a friend, a close relation, a creditor, or a member of the management, chooses to stand as a candidate; and aiding one might be taken to amount to obstructing the other. As for not subscribing, has humanity come to such a pass that one cannot concretely sympathise with another or with one's own community or an association with which one has affinity or any sort? Again, are people really afraid of *teachers'* influences? As a class, they have a much better record to give than many other "advanced" classes. The present move is ill-natured and ill-conceived and is sure to drive a peaceful class to the verge of

despair. Thus deprived and disgraced, how can the teacher mould the future of the nation?

Next, the benign Government has permitted the teacher to exercise his vote without a whisper as to the manner of his disposing of his vote. This is asking the teacher to cease to be a human being. Of all things in the world the one most difficult to achieve is to keep a secret; and even if it be kept, it cannot be kept for long.

At the end of it all comes the punishment. Managements when required by the Director to dispense with teachers' services shall do so on pain of forfeiting Government grants if they fail to act in response to instructions received from above. This will come as a relief to certain managements who might be at a loss to know how to send out men obnoxious to them. This will only accentuate the sense of insecurity already widely prevalent among teachers.

The present step is sought to be justified on the ground that the restrictions operate with regard to teachers in Government institutions. But they forget the miserable payments miserably made in many of these aided schools to teachers whose despondency and penury are chronic. If they are for equalising conditions, the best thing would be to let the restrictions be removed there.

It is unfortunate that the latest fetter to the already clogged feet of the teacher should be forged by a Congress Government, when there is so much of talk about the advancing Democracy. Let us hope that the Government will give due consideration and decide on early cancellation of this extremely undemocratic proposal.

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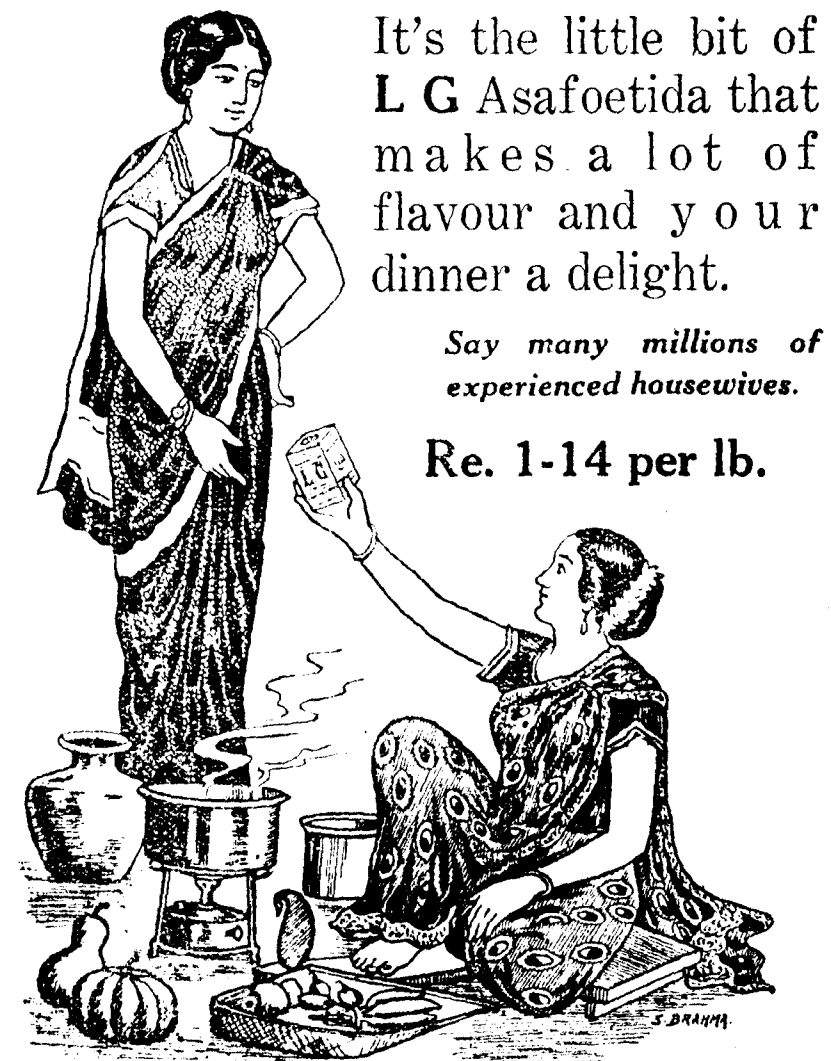
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