

98



THE INDIAN EDUCATOR

Vol. XIII

MAY

NO. 5

1937.

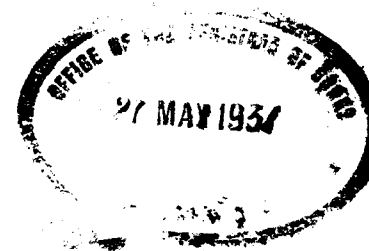
SL
M2, N2, 2N
N37.13
16

878

Reg. No. M. 2027.

Vol. XIII—No. 5.

THE INDIAN EDUCATOR



MAY, 1937.



Managing Editor:

V. Aravamuda Ayyangar, B.A., L.T.

Annual Subsn.: Rs. 2.]

[Single Copy: As. 3.

NEW STUDY READERS

BY

HENRY MARTIN, M. A. (OXON.), O. B. E.

LATE PRINCIPAL OF THE ISLAMIA COLLEGE, PESHAWAR.

Reader I, As. 7; Reader II, As. 9; Reader III, As. 12;

Reader IV, As. 14; Reader V, Re. 1.

The following are some of the prominent features of this new series of English Readers, planned to teach our children to speak and write English effectively. It is the outcome of years of practical experience, and combines the best features of modern methods of teaching a foreign language.

1. The reading matter is very carefully graded; it is also easy and of varied type and interest.
2. Variety is a characteristic of each book.
3. In each book there are many lessons in dialogue form to familiarize the children with Spoken English.
4. The whole series is abundantly and artistically illustrated.
5. The varied exercises in composition, given at the end of each lesson, form a unique feature of the whole series. They are both full and instructive, and supply suitable material for practice.

COOPER-PUBLISHERS-BOMBAY-6.

CONTENTS for May, 1937.

	PAGE
1. Hindrances to the Growth of Secondary Education By Mr. K. G. Warty, M. A., B. T.	161
2. Why the teaching of Arithmetic suffers By Mr. D. V. Chickermane, B. A., B. T.	165
3. The Teaching of English By Mr. S. M. Datta, M. A., B. T.	172
4. Training of the Child Memory By Mr. V. V. Divekar, B. A., B. T.	174
5. Siva in Madura Temple By Prof. K. S. Srikantan, M. A., F. R. Econ. s.	177
6. Copying Tendency By Mr. B. R. Deshpande, B. A. (Honours), B. T.	180
7. Mysore's fitness to give a lead to the Vocational Education in India. By Mr. C. S. Krishna Aiyar, M. A.	189
8. Some Problems of Secondary Education By Mr. K. S. Venkatasubban, B. A., L. T.	191
9. Cavalry Training in Germany By General Freiherr von Dalwicz zu Lichtenfels	195
10. Notes	198
11. Reviews	

THE CORONATION ENGLISH READERS

Edited by Prof. J. C. Rollo, M.A.

(PRINCIPAL, MAHARAJA'S COLLEGE, MYSORE)

PRIMER, PART I (III Class) ANNAS 3

PRIMER, PART II (IV Class) ANNAS 3

PRIMER, PARTS I & II ANNAS 6

BOOK I (V Class) ANNAS 6

Books II, III, & IV will be ready shortly

The above series of English Readers are the result of a study of the present day needs of pupils learning English at the early stages. The books are well got up with illustrations. A perusal of the books will convince any teacher of their special merits.

Applications and orders for specimens from teachers will be attended to immediately.

The rep

some progr

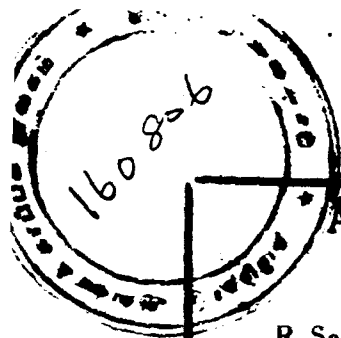
vinces an

progr

been.

CO., EDUCATIONAL PUBLISHERS,
15 JOSEPH STREET, MADRAS.

B. G. PAUL & CO.
12, FRANC



A Text-book of Elementary Science.

(According to the revised S. S. L. C. Syllabus)

BY

R. Sankara Ayyar, B.A., L.T., & V. Sreenivasa Aiyar, B.A., L.T.,

*Part I	Simple Physical Measurements	...	0-5-0
*Part II	Simple Machines & Heat	...	0-5-0
*Part III	Chemistry	...	0-6-0
*Part IV	Plant Life	...	0-5-0
*Part V	Animal Life	...	0-5-0
*Part VI	Physiology, Hygiene & First Aid	...	0-6-0
*Part VII	Light, Sound, Electricity & Magnetism	...	0-8-0

*Approved by the Text-Book Committee.

Elementary Science Questions & Answers according to the New Model.

By the above authors.

Part 1.	Physical Science: (Physics & Chemistry)	...	0-6-0
Part 2.	Natural Science: (Botany, Zoology, Physiology)	...	0-6-0

Hand-book of S. S. L. C. Chemistry (Optional) 3rd Edition revised
Price Rs. 2-0-0

A Text Book of Physics for the S. S. L. C. (Practical and Theoretical).
Price Rs. 2-8-0

(By the above authors)

N. B.—25% discount to School-masters & Trade.

For copies apply to:—R. THIRUMALAI & Co.,

Post Box No. 1234, 49, Bunder Street, MADRAS.

Just Published!

January 1937.

OUR SCHOOL PUBLICATIONS.

NEW BOOKS IN ACCORDANCE WITH THE LATEST SYLLABUS.

HIGHLY USEFUL FOR THE LOWER FORMS.

1. A TEXT BOOK OF GEOGRAPHY for I to III Forms
by G. V. Rama Ayyar, B.A., L.T., Town High School,
Kumbakonam.

Book I for Form I-10 as. Book II for Form II-12 as.
Book III for Form III-12 as.

2. GENERAL SCIENCE SERIES for I to III Forms
Rev. G. P. James, B.A., L.T., B.D., and M. Somasunda
B.A., L.T.,

Book I for Form I-10 as. Book II for Form II-12 as.
Book III for Form III-12 as.

3. NARUNTAMIL SERIES for I to III Forms.
Book I for Form I-7 as. Book II for Form II-12 as.
Book III for Form III-9 as.

For copies apply to:

MESSRS. G. V. K. SWAM

EDUCATIONAL PUBLISHERS BOMBAY-6.

KUMBAKONA



THE INDIAN EDUCATOR

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

Vol. XIII.

MADURA: MAY, 1937.

No. 5.

Hindrances to the Growth of Secondary Education

BY MR. K. G. WARTY, M.A., B.T.

It is an admitted fact that in point of education India is the most backward country among all civilised nations of the world. Though we can boast of our glory of the past and of the stage of civilisation which none of the modern nations have yet been able to reach, one thing remains undisputed that we are not at present in a position to assert ourselves in any sphere of life. For this state of our country many vicissitudes in the political history of our country are responsible. So long as the Government of the country was often changing hands one could not expect any substantial development in the system, growth or method of education. But the advent of the British rule and the consequent peace and happiness and also leisure to think about these problems gave us an opportunity to grow and develop our educational ideas. For the last one hundred years the British Government have assumed the responsibility of educating the mass of people in western sciences and culture. But it is very painful to note that the progress of education has been very slow indeed. Compared to other nations like Japan, which could bring about a complete change in the education and aspirations of the nation within a short period of half a century, India's progress is at a standstill. It is indeed a pity that after a lapse of a full century not more than 8 per. cent of the population is literate, which include even those who can only and simply sign their names.

The reports of the Education Departments show that there has been some progress in the growth of education. But if the resources of the provinces and the intelligence of the people are taken into consideration, that progress is quite unsatisfactory and far from what it ought to have been. The latest report of Bombay shows that there

has been an increase in the number of schools and also in the number of pupils. But many of these schools are located in cities only and therefore much importance cannot be given to this percentage of increase in pupils. If the towns and cities have shown any progress the rural areas are totally unaffected and remain as they were educationally. Since the introduction of the reforms of 1919 and the transfer of educational portfolio to the control of a minister responsible to the legislature high hopes were entertained by all educationists. But to our great disappointment they were found to be dupes. We have found our Education Ministers one after another sleeping over the vital problems regarding the diffusion of education among the people and taking shelter under the most convenient plea of want of funds. The progress of Secondary Education in particular has been too slow to be recognised. The Government schools in Bombay which were originally started as model schools have now ceased to be model ones; and the privately managed schools have to labour under innumerable difficulties in trying to show any progress. It is now high time that serious consideration was given to these problems if India is to succeed in the democracy which is intended to be introduced by the new constitutional reforms.

Among the main hindrances to the growth of Secondary education in the country can, therefore, be included the want of will on the part of the Ministers in charge of Education. A good number of reforms can be introduced in the system and method of education in the matter of teaching and in administration, without spending a single additional pie. Equalisation of educational grants, fixing the pay and minimum qualification of the teacher, more liberty in internal management of school and particularly trusting the Head Masters more than the managers in educational matters by treating them as the representatives of the department, insisting of employing trained teachers only on the teaching staff of the schools are some of the reforms which the ministers can easily introduce without any extra responsibility on the part of the Department. Adoption of vernacular as the medium of instruction unto the School Leaving Examination is now being slowly brought about, inasmuch as in Bombay the pupils are allowed to answer any paper except English in his vernacular. The Department should give an impetus to this move by issuing a circular to the effect that the Government is in favour of adoption of vernacular as the medium of instruction. In short the department should adopt a definite policy in Secondary Education and consequent reforms in the administration of schools.

There is another hindrance to the growth of Secondary education in the belief of some of the people that English Education creates among

our boys and girls a tendency to disrespect their elders and their religion. The belief is not without foundation, for the pupils that received English education felt within themselves that their minds were liberalised and began to search their hearts and customs to find out how far they were conforming to the new ideas and ideals they had formed. So their actions were to some extent responsible for this belief among the orthodox people. It is a sad thing that there should exist such a belief that irreligious tendencies are the result of any education at all when righteousness is admitted to be one of the aims of education. The present system and methods of instruction are not able to remove this wrong belief; nor will the introduction of religion as one of the subjects in the curricula remove it. Insistence on the right sort of conduct on the part of teachers whom the pupils as a rule try to imitate is the best way of improving the situation. Our younger generation should learn the rules of right conduct not through direct teaching but through observation of the conduct and manner of the teachers in school and parents at home. The Heads of schools should prevail upon the parents and general public to visit their schools and try to create confidence in them by giving them opportunities to freely criticise the policy of the Head Masters and offer suggestion for improvement. In fact, the heads of secondary institutions should create occasions when they can remove any misunderstanding on the part of the parents and older people.

One more reason why secondary education does not show a satisfactory growth is that it has been very costly for the majority of the people. Indian villagers are as a rule very poor and it is a luxury for them to send their sons and their daughters to secondary schools. And those who at some cost to their comfort and necessities of life undertake to give English Education do so with the object of making their boys able to earn their bread and help them a little when they grow. Their want is the bread-and-butter education. But they find that these boys do not secure good jobs even after passing their School Leaving Examination and consequently they begin to clamour against the present system of education. On one hand we find that the majority of the people are too poor to go in for secondary education, and on the other we find the Government trying to increase the monthly fees and make it more costly than it is at present. It was indeed a pity that the Bombay Presidency Teachers' Conference held at Bombay in December last passed a resolution which amounted to say that the present rate of fees in secondary schools should be raised. The resolution was proposed and seconded by two Govt. officials and was carried because of the consideration given to the position and power of those officials.

England has made instruction free upto the age of 15 which corresponds to our English Standard VI; United States have all secondary education practically free; and every civilised and self-governing country is trying to expand educational facilities by making it cheap, while India has not yet felt the need of considering this problem in its right perspective. In England "Open the School and close the Jail" is the outcry; but India still wants to maintain the jails more efficiently than the schools.

The problem of grants in aid of Education is one which deserves serious consideration. The system in vogue in Bombay at least is faulty. It should be clearly recognised in the first place that it is the duty of the State to impart education to the people of the country and that education should be the first concern of every national Government. With the provincial autonomy now introduced and with the popular ministers at the head, we hope things will change for the better.

Why the teaching of Arithmetic suffers

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

Arithmetic is looked upon by many pupils as a difficult subject in their school curriculum. It is the stumbling block of a majority of children. In fact, in Primary Schools more students are detained for failure under this head than under any other. It has been frequently observed that there is much wastage in the Primary School course. The report of the Director of Public Instruction, Bombay, for 1934/35 gives us an idea of the wastage. The per-centage of boys studying in the infant class in that year was 31 and of girls was 43. This per-centage steadily decreased and in the 4th Std. for boys it was 11.5 and for girls 7.4. Failures in the Examination and consequent detentions are to a great extent responsible for this wastage. When pupils seeking admission in a High School after the Primary course are tested, one finds that, even with simple sums, more than half the pupils get confused and are unable to solve them. Backwardness in Arithmetic is confined not merely to Primary classes, but also to the Secondary school classes, where Arithmetic is equally dreaded. There, however, pupils depend upon Algebra and bookwork in Geometry for their success in the Examination and trust little to Arithmetic. When recently Arithmetic came to be deleted from the list of compulsory subjects at the Bombay Matriculation, the change was welcomed by the student-world with a sigh of relief, though the parents and the public regarded it as unwise and retrograde.

An enquiry into this state of things reveals to us some of the causes that have led to it. Among them, firstly, mention must be made of our mechanical methods of teaching, which stimulate no independent thinking. As in every other subject, so in Arithmetic, examinations appear to be the goal of pupils and teachers. Teachers teach Arithmetic and pupils study it with the sole object of getting through the examination. Even the educated public gauge the quality of instruction imparted in a school on the examination results. Thus the teachers have to equip their pupils with such information and training that will help the greatest number of them to get through the Examination. Their guides in this are the questions set at the previous similar examinations. They do not bother themselves to see that the pupils have understood the principles taught by them or digested the information given to them and are able to use them in practical life. In many cases, the pupils know the processes of solving stereotyped examples, but get confused

if there is a slight variation in the wording or the data of the problem. In other words, the learning of Arithmetic has become purely mechanical. It does not stimulate the pupils to think for themselves. They have no opportunities for independent and clear thinking or reasoning out the process. For solutions, methods, the pupils look to the teachers and are guided by them in minute details. Like History or Geography, proficiency in the subject, depends upon the memory of pupils. One instance will give the readers a clear idea as to how mechanical the learning has become. Pupils are taught that the area of a field is calculated by multiplying length by breadth. To calculate the area of the walls of a room, they have to add the length and the breadth of the room, and multiply this by two and the height. Every student knows these and will solve examples on area readily though he has no idea what area is. If one were to ask him, why we should add length and breadth, or multiply it by two, why not divide it or subtract, or any other question on the process, which would set him thinking, he would be unable to give satisfactory answers.

The medium of English which is still used in many schools in teaching, is another set-back for the pupils. The wording of some of the books that are used as text-books is so terse and vague that it becomes difficult for the pupils to grasp the meaning of many of the problems. If such be the case, how can we expect them to think out and find the solution for themselves? Happily Vernacular is taking the place of English in many schools as the medium of teaching. In some schools where pupils of different vernaculars are admitted, English has to be used through necessity, as the medium. The difficulty of getting suitable text-books in vernaculars is also one of the obstacles in the path of introduction of vernaculars as the medium.

Secondly, it should be noted that Arithmetic, as taught in our schools, is tending to become more and more remote from human life and our daily experiences. The problems that are set are of more academic interest and involve complicated operations of fractions, rarely met in common life. Arithmetic ought to be taught for its utility in life and topics which are of interest and utility should be included in the curriculum. Our pupils can work out harder examples in simple and compound interest, but have no idea of the Post Office Savings Banks. They can work out examples in Proportion, but get confused when they are asked to calculate Income tax or Insurance Premium, or interest on deposits. They can easily work examples in Mensuration and Areas but when they are asked to make use of their knowledge in practical life, they prove failures, simply because they have had no such training.

or the problems they have worked, rarely pertain to life, or actual situations in it. Their ideas of Government Securities, or Cash Certificates are very vague, though they can work out many examples based on them. Arithmetic has to justify its position in the Syllabus from the utilitarian point of view, but in actual practice we find the reverse. As such the study of Arithmetic appears to children something difficult and tedious.

If pupils are to take an intelligent interest in Arithmetic and are to be benefited by its study, it is necessary that both these defects should be removed. It should be the aim of teachers to make the pupils think rather than reproduce what they have given to them by way of notes, or as guidance. Mere reproduction of stereotyped processes should be discouraged. This will be possible if the teachers who teach the subject are trained for it. The policy of entrusting any subject to any teacher is harmful to the interests of both the teacher and taught. There can be no definite improvement in the quality of instruction unless the number of trained teachers is increased. The latest report of the Director of Public Instruction, Bombay, shows that the percentage of trained teachers in the Bombay Presidency, in Primary schools, is 48 and in aided Secondary Schools, (excluding Government managed) is 13.4, which it will be admitted, is very low. The text-book, which we use, should also be thoroughly revised to suit our modern ideas. They should include chapters on Savings Banks, Income tax, Insurance and other business transactions, written in simple language intelligible to pupils. The problems should be taken from pupils' experience. So long as such text-books are not available, the teachers will have to frame their own examples to suit the requirements of the class.

The importance of a good knowledge of Arithmetic cannot be more emphasised. It is useful to the business man as well as the lay man, to the rich as well as the poor. Owing to the defects pointed out above in our teaching, pupils are losing interest in it and regard it as a difficult subject. It is the duty of the parents, teachers and the authorities concerned to make the learning of the subject easy, interesting and at the same time useful to students.

The Teaching of English

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

It is essential that we should consider what an abnormal waste of energy is involved in the learning of a foreign language in this country. Ordinarily four years should suffice to give a boy workable knowledge of English but after undergoing training for a period of 8 years a boy in a High School does not acquire sufficient knowledge of the subject to move in English Society or conduct daily business in English. The chief reason seems to be that colloquial English does not form a part of teaching which has been placed in the hands of such persons as are unacquainted with the modern devices of simplifying the study of a foreign language.

Whatever may be the imperfections of Direct method, it cannot be gainsaid that it is the natural method. Instead of learning about the language, boys get actual practice in it—they learn to speak by speaking, to hear by the hearing, to write by writing. Whoever has come across a boy reading in a European School from early years will find that he can express his ideas more clearly and easily in a foreign tongue than an ordinary boy reading in an Indian School. He may not be able to avoid grammatical errors but his vocabulary is much richer than that of a boy of his age. This is due to the fact that he is made to speak often and has to make an effort to make himself intelligible. But the method is effective only in the early stage when the complexities of thought do not arise.

Our boys hardly make an effort to learn the language for daily use. The great objective before them is to understand the meanings of certain passages occurring in the text books prescribed for use and express them in English. Teaching is entirely designed on the model of examinations and boys generally prepare answers to certain questions likely to be set. There are instances to show that some boys pass their examinations by committing to memory the whole of a text book.

No attempt is made to improve their composition and strengthen the foundation of the knowledge of a foreign language. To teach a foreign language properly entails a great hardship on a teacher. He should not only be trained but he must possess a rich vocabulary of words and idioms. This can be successfully done by one whose mother tongue is English.

Most of the teachers of English have picked up their knowledge from books. There is a small minority who have caught it fresh and warm for living lips. The use of monosyllabic words is rare in their conversation and B.A.'s and M.A.'s coming fresh from the University speak literary English which boys find difficult to follow.

English being our Court language and its importance being recognised all over the world, it is absolutely necessary that efforts should be made to develop the pupil's power of expression from early life. It must not be understood that the cultural value of English should be ignored in any way but it should be emphasised in the higher stage.

The entire subject of English is not treated as an organic whole while the various branches of its study such as Prose, Poetry, Grammar and Composition are entrusted to different hands. The result of this is that teachers are hampered in teaching the language as they cannot effect correlation among different parts of the same subject. The linguistic exercises should be connected with the reading materials, discussion of the contents of each lesson, written composition and translation. One lesson watched by the writer of the "German School System" who is an Indian is described below as a specific illustration. The teacher began by questioning the boys in English on the idiom, grammar meanings and subject-matter of the previous lessons. He then wrote on the blackboard the heads under which the story of the lesson should be told and asked these boys who could narrate it, to raise their hands. One of the many students who had put up their hands were called to the platform. Whenever he forgot any point while telling the story, the other boys were asked to help him.

The new lesson was then taken up. The teacher first of all explained to the boys what they were going to read about. The lesson was then read paragraph by paragraph by them and the meaning and subject-matter were explained by the teacher by means of questions and answers. The teacher used the blackboard frequently in connection with grammar and the meanings of words while in explaining the subject matter he correlated the lesson with History and Geography. The critical faculty was brought into play when the teacher asked such questions as 'What do you think of this story? Why is this passage beautiful?'

An excellent feature of the lesson imparted by German teachers of English is that hardly any German is spoken either by the teachers or the boys in Classes.

In early days of English education it was the practice in Bengal to emphasise speaking in English at least in the higher forms. A boy who could not make a request to his teachers in English was not attended to and by sheer compulsion he was made to speak in English. With the growing importance of the child's vernacular, the practice is not encouraged now-a-days though it was considered a useful agency of teaching a foreign language.

Formerly undue attention was given to the study of formal grammar and it was generally taught deductively. Grammar should not be considered an end in itself but its importance must be recognised. As English and an Indian boy's vernacular are widely different, a systematic study of grammar is necessary as it gives one command over the accurate use of a language.

The method which I have personally tried with success in the matter of language teaching is the Retranslation method. Let a boy translate an extract from an English text book into his vernacular and after a few days let him take up his own translation and render the same into English. By comparing his own production with the original one, he will be in a position to notice some peculiarities of expression which an Indian boy misses and the difference in the idioms of the two languages will be brought home to his mind.

Reading plays an important part in language teaching and it is not emphasised at present in high schools. The traditional method for a teacher is to ask the boys to read aloud some portion of a paragraph. They go in their own way and often their mistakes in pronunciation remain uncorrected as most of the teachers have not learnt the language from those whose mother tongue is English.

It is the duty of a teacher to give a sample reading lesson drawing the attention of the boys to correct accentuation as well as pronunciation of each word in the lesson. If the teacher will write the difficult word on the blackboard and drill the pronunciation, it will be easy for the boys to learn. All boys should be given the chance of reading by turns and marks may be allowed to reading not only in the lower forms but also in the higher ones. The services of a European having good pronunciation may be requisitioned for the purpose.

Oral composition is not at all stressed in our high schools. English being a foreign language, our boys are shy in speaking the language lest they should commit mistakes, which cannot but escape detection at the hands of a scrutinizing teacher. Formerly a debating club was

attached to each school and it helped the boys to deliver short speeches on common topics and write simple essays. Conversation on the subject matter of a class lesson under the form of questions and answers by pupils may serve a useful purpose in making abstract things real. Dramatisation may be resorted to so that the boys may practise speaking on the subject of the lesson.

The Education Department does not encourage holding too many examinations now-a-days. Hence regular weekly exercises which trained the boys in habits of writing in the past have ceased to exist. Examinations had this advantage that they enabled the teacher to diagnose the defects of students and adopt remedial measures. The present system of giving class exercises is not fruitful of good results as the corrections are made by the teachers themselves and no attention is paid to them by the boys. It seems to be necessary that boys should correct their own errors in consultation with the teacher. As we develop the power of speaking by speaking, we have to follow a similar process in teaching the boys to write correct English.

Training of the Child Memory

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

While I was engaging my own class, one day, I casually asked my students to recite one whole good poem and, to my utter surprise, I found no show of hands. Then I asked each one of the students individually and got the disappointing reply from every one that they could not do so. My class was not a bad one as it consisted of several first class students and this strange response from them set me thinking very deeply as to why such a state of things should exist at present in our schools.

There is no gainsaying the fact that the literacy among us is on the increase and that all the people have realised the importance of education. If such be the case, why should students then be in such a state I could not at all understand. I had once the good fortune to listen to the late Dr. Bhandarkar, who said in the course of a speech that in case the present generation is not capable of producing such great men as Ranade, Telang and Pheroz Shah, it is due to the education which we at present receive in our schools. Whatever may be the view-point of others and however divergent the views of us who toil in the field of education, I should consider that the methods of study of the present generation have very considerably changed, as very few students realise the seriousness of study.

I remember that when I was studying in the Primary School, it was incumbent upon us to learn by heart all the multiples ranging from 1 to 30 as well as many other things besides committing to memory several other things like texts from the Gita, Abhangas from Tukaram and verses from Ramayan. But oh! those days are gone and the latest methods have taken the place of old ones, condemned and relegated to the limbo of oblivion. Such committal to memory of things not understood has been branded as cramming and recitation and repetition have been held over for a later period, when students are in a position to understand what they repeat.

I remember to have read long ago what Byron said about such repetition. He said that oft when he repeated in later days what he had learnt by heart in his school-days, little understanding then the meaning thereof, he had a sort of great mental pleasure, when he was able to repeat the poems and understand the real and inner meaning of the verses. It is my impression and belief that the students who learnt

Sanskrit by the old Shastric method could understand Sanskrit better than those who learn Sanskrit at present. Views may indeed differ as Macaulay says, "Minds differ as rivers differ".

I am therefore trying to point out that learning beautiful verses and text by heart in childhood and in the school days certainly does good and is a life-long achievement and a casket of gems to those who hold it. I remember an occasion in my own place when Dr. Mann, once the Director of Agriculture, Bombay, delivered a lecture on agriculture in Canara and hinted that we should take care of agriculture and then wealth would surely come to us in plenty. The lecture was much appreciated and an old man who was called upon to thank the learned Doctor got up and carried the audience with him by repeating the well known lines of Goldsmith,

"Ill-fares the land to hastening ills a prey,
Where wealth accumulates and men decay."

The lecture went home to the audience and every one went home highly pleased with the old man's quotation from memory. I very much doubt whether many of our young men will now be able to repeat, as I said at the beginning of this article, 10 beautiful lines of poetry from any modern or ancient poet. The syllabus followed in Secondary schools requires, as put down in schedule B, that 100 lines of good poetry should be learnt with ease by heart. This is no doubt done in schools but along with the promotion to higher classes the lines slowly evaporate from their mind and by the middle of the year the whole thing is completely forgotten.

I certainly feel very sorry for such a state of things and as rules stand the Dept. cannot be held responsible for this state of affairs, which now exists. I am of opinion that students are mainly responsible for this state, as in my opinion, they have not realised the importance of knowing any gems of poetry either in English or any of the Indian vernaculars and committing the same to memory. They take the study of poetry very lightly and do not at all feel the importance or necessity of committing real poetry to memory; which will serve as a treasure chest to them for all time to come.

Siva in Madura Temple

By PROF. K. S. SRIKANTAN, M.A., F.R. Econ. S.

(Continued from the February issue.)

Among the Samhara Moortis carved in this temple at once the finest and terrible is the image of Gajasuramoorti, seen in one of the pillars in the Kambattadi Mantap. Siva is here seen killing an elephant and dancing with its skin as a Prabhamandala. This Moorti is more beautiful than similar Moortis represented in other temples. Again we do not find here the figures of Devi and Skanda usually associated with Gajasuramoorti. At the foot of Siva we see the head of the elephant monster. At the top we see the tail of the elephant and on either side the legs are most graphically chiselled. A very large number of nicely worked out ornaments are seen on the image of Siva. Siva has eight hands. In the three right hands are seen the trident, the kettle drum and the noose. Two of the three hands hold the shield and the skull, while the third left hand is held in Vismaya pose. One cannot but be struck by the solemnity of the face. Several are the versions about the reason for Siva killing this giant. No doubt all versions agree in the fact that Siva killed an elephant and made use of his skin as a garment. The Kurma purana while describing the Linga in Benares observes that Siva came out suddenly from this Linga to kill an Asura who had assumed the shape of an elephant to kill all the Brahmins who were sitting round the Linga absorbed in meditation. A village in the Tanjore district called Valavar is associated in the Tamil country with this destructive act of Siva and this is perhaps the only place which has a beautiful metal image of Gajaharamoorti.

Kalahara moorti is another type of Samharamoorti. Here we see Siva killing Yama, god of death who came to take away the life of Markandeya, a staunch devotee of Siva. Rishi Mrikandu, it is said, was long without a son. He prayed to God for a long time. In answer to his prayers Siva appeared and asked him whether he would have many useless sons or one remarkably intelligent son who would live for only sixteen years. Mrikandu chose the latter and so very soon his wife presented him with a son who was named Markandeya. No doubt, as indicated by the Lord, Markandeya exhibited rare talents. But his parents were becoming more and more anxious as years advanced. The boy who got scent of this impending disaster to the family began to offer puja to Siva and thus became a great devotee of Siva.

The God of death appeared exactly on the due date to take away Markandeya little realising that Markandeya was now under the protection of Siva. We see in this sculpture Markandeya hogging as it were the Siva Linga. The God of death is under the left foot of Siva who is seen dancing on the back of his body. The pointed left toe of Siva is seen piercing through the neck of Kala (Yama) while the right leg is on his hip. The twist that has been given to the body of Yama has only to be seen to be admired. It is at once natural and wonderful. The shield is held by Yama in one hand and in the other we are able to see clearly the rope binding Markandeya. We see the God of death looking up to God Siva for his grace. The calm in the placid face of the figure of Siva in this terrible encounter with evil forces personified in the form of the demon crushed under his foot is a telling suggestion of the mighty glory of the Lord to whom no achievement is so great as to cause the slightest ruffle perceptible in his countenance. The entire sculpture is very neatly executed and the sculptor has enabled us to see the anatomical details of the human body perfectly. Among the Samhara Moortis in the South Indian temples this seems to be a type by itself.

Tripurantaka Moorti is another important aspect of Siva. We see this sculpture both in the Podumantapam and Kambattadi mantap. The one in the Kambattadi is far superior and better polished and carved. Here we see Siva just about to start on a military expedition in his delicately decorated chariot drawn by four horses. The right leg of Siva is kept a little in front and the left slightly bent to indicate motion. Siva is seen almost standing on the toes. The right hand is held in the simhakarna pose and is holding the bow string in which the arrow is set. The chariot itself is being driven by Brahma whose figure is seen just above the horses. Just opposite to this pillar we have the carved figures of three Asuras against whom Siva is proceeding.

The three Asuras represented in the pillar just opposite were the sons of one Takkasura. After performing severe penances these three asuras obtained from Brahma the boons by which each one got a castle to his liking—one was of gold and was located in heaven; another of silver located in the air and the third was of iron and located on the earth. These three castles were to become one after one thousand years and could be destroyed only by a single arrow. The atrocities committed by the Asuras were intolerable to the gods and goddesses; they therefore resorted to Brahma for advice. He suggested that they could go to Mahadeva who alone wielded such a wonderful weapon. God Siva, when they approached, yielded to their prayer and started on his adventure. In their gratitude the gods served Mahadeva in seve-

21, 225 26
237-13-531 160806

ral capacities. Vishnu became his arrow, Agni its barb and Yama its feather. Mahadeva made the Vedas his bow and Savitri his bow-string. Brahma became his charioteer. This is the composition which we see executed in the pillar. Though Siva is out on an expedition, his facial expression is remarkably serene. The nails and the nerves are most realistically indicated. The chariot itself by its superb decorations well deserves its worthy occupant.

Under Samhara Moortis must be mentioned the figure of Siva as Vira Bhadra located just to the east of the Kambattadi mantap. The figure itself exceeds the size of an ordinary man and is one of the most superb in this temple. The proportions of the limbs cannot escape the notice of any. This form was assumed by Siva as already pointed out to destroy the Yajna of Daksha. In this sculpture we see Vira Bhadra with ten arms; three out of the five right hands carry the bana, the parasu and the khadga; of the remaining two hands, one holds a long sword which is thrust into the neck of Daksha and the other pulls out an arrow from the quiver. The left hands keep in them the dhanus, the musala and the pasa. Behind the jata mukha we see flames on either side. Vira Bhadra is seen standing on the prostrate body of Daksha prajapati. The way in which the sculptor has indicated the thrusting of the sword through the neck of Daksha is particularly noteworthy.

We may now pass on to consider the various Santamoortis of Siva. Among these the figure that has received the maximum appreciation is that of Kalyana Sundara moorti. This is also the most popular as the marriage of Goddess Meenakshi with Lord Sundareswara is the central theme of many a local legend. Here the sculptor has given a realistic description of Sundareswara's marriage with Goddess Meenakshi. We see Maha Vishnu pouring the sacred water on the joined hands of Sundareswara and his consort. Below are seen Brahma tending the sacred Agni and numerous other ganas exhibiting a rare sense of joy. This figure is carved in many places in and around Madura. The two outstanding among these are the one found in Kambattadi mantap and the other in Pudu mantap. The uniformity maintained in the depiction of these figures shows that the Indian artists were experts in the art of imitation too. "When these artists were able to carve one image exactly like another, will it be impossible for them to carve an image exactly like a human being if ever they cared to do so?" The figure found in Pudu mantapam belongs to the time of Tirumala Nayaka while the other found in Kambattadi mantap is a recent carving. The figure Kalyana sundra moorti is artistically perfect. The admirable modesty expressed in the slightly bent face of Parvati cannot escape

the notice of any pilgrim. In the words of Mr. T. A. Gopinatha Rao, "In these the principal figures are Parvati, who is being given to Siva in marriage by Vishnu pouring water in the hands of Siva; and Siva standing on the left with his right hand stretched out to receive the gift; in front of and between him and Vishnu is seen, with the head bent down in shyness, Parvati keeping her right hand lifted up so as to be taken hold of by Siva; and on the left is Vishnu pouring water from a vessel on the hand of Siva. Below and in a counter sunk panel is seen Brahma making fire-offering. The whole subject is treated with great cleverness and the effect is very striking. There is not the elaborateness which one meets with in the cave temples of Northern and Western India, but the very simplicity of the sculpture carries a great charm with it. The shyness depicted on the countenance of the bride is very noteworthy. The form of the face is rounded like a hen's egg." Vrishabarudra moorti or Siva on his bull is another very interesting representation of Siva seen in this temple. There are two pillars in the Kambattadi mantapam having Siva in this form. This form of Siva is held in high veneration, because it was in this form that Siva appeared to his devotees. (To be continued.)

Copying Tendency

BY MR. B. R. DESHPANDE, B. A., (Honours), B. T.

I was thinking of composing myself to rest at the fag end of the year when the call came from the editor for a contribution. I was chalking out a programme of spending the summer holidays in some cool shady place on the bank of the Krishna. The early morning hours were set apart for swimming, the mid-day for a heavy meal and a nap, and the evenings devoted to long rambles along the river-bank. I was just going to dispose of the nights when I was rudely awakened from my day-dream by the postman's knock that served me with the editor's summons. In such a condition, what was I to write upon? I was not left thinking long over the subject. I took the clue from a casual discussion.

From every day experience in the class-room, a teacher finds that some pupils have a tendency to copy—or to be clearer still,—to use unfair means to pass their examination. When this is found out, subject teachers feel offended, supervisors admit their slackness, and enthusiasts find fault with the seating arrangement and lack of severe punitive measures on the part of authorities concerned. Honest folk! They do

not seem to realise that these measures, at best, only lessen copying. They do not go to the root of the matter. Strict supervision, proper seating arrangement, etc. are all police 'bundobast' which might prevent crimes for the time being, it does not deal at all with the tendency to copy. On the other hand, the more conscious the attempts to check copying, the more deliberate and skilful may be the pupils' attempts to copy. The whole thing may develop into an unhealthy game in which the teachers are on one side and the pupils on the other, each trying to defeat the other. Therefore the measures we adopt, shall be such as not merely to lessen copying but to sublimate this tendency by redirecting it into healthier channels.

But why does a boy copy? Various people give various answers. The old answer that a child is born a sinner is so clearly proved to be a myth that it does not need any further discussion. Class-test is a measure of a pupil's abilities during a particular period. Every pupil naturally wishes to stand well in the opinion of his parent, guardian, master or neighbour. The instinct of self-display, if I may be permitted to call it, must have scope. He does make honest efforts in the beginning. Let no one deny this! Later on he finds that honest efforts by themselves do not go far enough. There are examiners who prefer answers in the annotations to the honest answers attempted by the boy. A boy who passes another's answer as his own, comes up higher than an honest boy who attempts to give his own answer. ~~What is the reward for self-effort? In the case of the lower boys teachers insist so much on reproduction of their own answers that the boy's originality is suppressed and he repeats parrot-fashion the teacher's own answers. What is the boy doing here? He is mechanically copying not his neighbour, but his master. This is equally bad. It is highly interesting to see how teachers prepare their classes for inspection. A fortnight before, special classes are held morning, evening, noon and night. Classes are drilled in set answers to set questions. At the inspection time, if the inspector slightly interferes or questions the class himself, the cat comes out of the bag. Teachers do not object to their answers being copied by pupils. On the other hand, they pride themselves on the pupils' achievements. What a perverted understanding! Copying is copying whether they reproduce their neighbour's answer or their master's, provided they have no share of their own in arriving at that answer. But we refuse to see things in their real nature. If it is a merit to copy a teacher's answer, why not copy a neighbour's, why not an annotator's? The vicious circle goes on till copying has been a deep-rooted vice. Who is responsible for this? Never suppress a boy's~~

originality. Never force your own views upon him. Accept what he has to give, correct and alter it, if it deserves that. Make him think and not merely copy you. Be a leader, not a dictator. Remember a modern teacher is a leader, not a dictator; nor a slave-driver.

As we have seen above, the instinct of self-display is at times responsible for copying. More often than not, our own tests are faulty. They always test one and only one power of the pupil, viz., his power of English Composition. A pupil may have the best knowledge of history, geography, or science. Since he cannot express himself properly in English, he fails miserably in the test. This difficulty is disappearing to a certain extent, since pupils are allowed the option of answering in their vernacular. But it does remain in science, geography etc. as vernaculars are not yet so developed as to supply suitable equivalents for technical terms.

Understanding is different from expressing it in writing. A pupil may have understood a passage, appreciated its beauties too; at the same time, if closely questioned on the passage, he may fail in the oral as well as in the written test. Why? His power of expressing himself in English or his English Composition is so weak. At the same time if he is asked to illustrate a particular passage by a sketch of drawing, he may very well do so, and prove that he has better understood the passage than any one else who merely juggles with words. So we must take care to give an all-sided test—comprehension, expression, true-false, blank-filling—etc., so that all the powers of a pupil are simultaneously tested and that if he lacks in one kind, he may easily make it up in another, and thus honestly stand well in the opinion of his fellow beings. The instinct of 'self-display' will not thus be unnecessarily thwarted.

Last, but not least, is the School-atmosphere. Teachers, and more especially managers must try to create a healthy moral atmosphere in the school. No dishonest act should go undetected. Merit, self-effort, seniority, and not favouritism or communalism, should be the prime factor in considering promotion, assigning rank, position etc. Our daily behaviour shall be such that it will unconsciously influence the pupils who will take it up as a model without being asked to do so. It is our good character and conduct that the youngsters should unconsciously copy with profit, and not our own answers and whims that are forced upon them, though not at the point of the sword, yet by pointing the cane. It is only thus that the copying tendency will be redirected into a healthier channel and sublimated.

Mysore's fitness to give a lead to the Vocational Education in India.

BY MR. C. S. KRISHNA AIYAR, M. A.

Please permit me to confess at the very outset that I am really a laymen in the field of vocational education, for I had had not, so far, any kind of vocational training in my career; nor do I claim to have made any special or deep study of this very complex but nevertheless interesting and important subject. As a few hours' thought on the subject convinced me that this State of ours possesses some unique facilities for inaugurating a scheme of vocational schools, I thought that I might as well place my humble views before a learned audience like you and welcome your valuable hints and suggestions on the subject. Hence I wish to impress upon you the fact that the object of my attending this conference has been more to learn from you all, than to communicate to you anything useful and valuable and I shall certainly consider myself highly fortunate, if, at least as a result of this prayer of mine, the proposed scheme of the Reorganisation Committee is brought into force by our Govt. at a very early date.

I propose to deal with my subject under these headings: (i) The unanimous opinion that exists at present in our country on the need for vocational schools; (ii) Some general factors that contribute towards the success of a scheme of Vocational Education; (iii) and lastly applicability of each one of these factors to our Mysore state.

I

The heading of my paper, of course, takes for granted that the time for educating the public opinion in favour of vocational education has long past and all that is needed in our State at present, is to bring into force, as early as possible, the scheme so ably prepared by the Reorganisation Committee. Years ago, it has been admitted in our country, that the school whose courses are mainly—if not entirely—designed to meet the requirements of the university examination is a definite handicap to industrial expansion in India; long ago, it has been clearly realised that the true function of secondary education is preparation for living and that this preparation must necessarily vary with the mode of living for which the pupil is intended. Unfortunately, even to-day, most of our High schools in India, work up to the same system of exami-

nation, pursue the same curriculum, without any appreciable variations, assuming that all pupils are alike and have like aims. To quote a well known educationist, "the idea that a good general education of the University type is the best, or even an adequate preparation for every kind of career is as false and mischievous as it can be".

The root of the present day trouble of hundreds of young men with University degrees literally starving or leading a parasitical life is to be traced to the Secondary education imparted in our High Schools, for these prepare our boys only for the Universities. All responsible men in our country are agreed on this one point, namely, our Secondary education should be entirely reformed so that vocational training would be available for children as an alternative to academic subjects. "If something is not done, and done immediately too, the body of unemployed intellectuals will become a serious political problem as the disillusionment of the intellectual proletariat breeds bitter discontent and unrest".

Though year after year, the need for a well thought out scheme of vocational training has been growing more and more urgent in our country, no province seems to have tackled the question fully and successfully. True, some attempts have been made here and there, but for a vast country like India, with such industrial possibilities, such attempts are rather too meagre and inadequate. A systematic beginning has to be made and that too on a fairly large scale. Prof. Sarma of Trichy is, therefore, not at all over-emphatic, when he says, that "it is absolutely necessary to confer the benefits of vocational training on all the pupils in the elementary, secondary and college stages, so that education may at least solve the bread and butter problem".

II

Coming now to a few of the contributory factors of success, I have to put as first and foremost Time factor. Even the best and the most useful reform is bound to fail, if it is in advance of the times. This factor is decidedly on our side. Within recent years, all the nations of the world—however small in area and poor in resources they might be—have been more or less concentrating their resources on development of industries and manufactures with a view to strengthening their economic position on a sound basis. In other words, Economic Nationalism is the order of the day. Life has become a great struggle for existence, not only for individuals but for nations as well. So, if we do not want our country to be wiped out of the surface of the earth—as Abyssinia of Africa—we have to move with the times and make the necessary adjustment, especially in our educational system. Our failure to do so

*A paper read under the auspices of the M. S. F. I. at Chickmagalur, Dec. 1936.

till now, only painfully illustrates either our utter helplessness in remodelling our own educational system or the intensity of our hide bound conservatism, i.e. opposition to all change.

Apart from this patriotic motive of developing the resources of our country and providing employment for its millions, there is another factor which must act as a powerful stimulus for furthering a scheme of national vocational education and that is the natural inequality of our boys. "The idea of natural equality, boomed up in the 18th century, has been conclusively proved to be a figment of the human imagination; we now know for certain that individual inequalities steadily increase as we ascend the biological scale." Does not plain commonsense tell us the curricula of studies in our schools should be as varied as possible to suit the varying needs of the different types of children?

At no time in our country, perhaps, have there been so profound a discontent with the prevailing system of education as just at present. Everyone, specialist or layman, has to say something against it, to condemn it as quite useless, unsuited to the times; and in spite of ingenious and subtle attempts made by a few in defence of it, there is a general consensus of opinion in that the system requires a thorough overhauling. Every Educational Committee or Board, appointed not only in the various provinces and states of our country, but even outside India, has made imparting instruction in some kind of vocational subjects or other, its main suggestion in the report. The public opinion has thus been sufficiently educated and a very favourable atmosphere for introducing a scheme of vocational education has certainly been created.

The next important factor is government support. That a good system of education is the most important duty of any govt. has now been recognised all over the world. To quote an Educationist, "Every individual has a threefold function in the world—to make a livelihood, to be a citizen and to be a man, and the State has to see that every one has the opportunity of performing these three functions. The aim of a national system of education should be that of making it possible for all young citizens, irrespective of birth, wealth or station to receive the kind of education by which they can best profit." However philanthropic and generous individual citizens, Associations and firms might be, an elaborate scheme of vocational education, to succeed, must be taken up, in right earnest, by the govt. of the country.

I might term the next factor as an industrial environment. Technical, industrial and even vocational institutions can thrive only in an

industrial environment, which can supply students with opportunities of practical experience and later on, help them to secure well paid employment. It also implies that the services of experienced and successful men in the various trades and professions—and not of mere theorists, however high their academic qualifications might be—have to be utilised to the maximum extent, if the scheme of vocational training is to succeed in a country.

A well-equipped Psychological laboratory may be deemed as another important factor. "In fitting an individual for his vocation, one has to take into account the aptitudes, habits, skill and the interests of the individual; and these can be ascertained only by a series of vocational tests. Such tests conducted in the well-equipped Psychological laboratories of the western countries have shown whether an individual prefers to work with his head or his hands, prefers indoor or outdoor work, inclined to originate or imitate, to adapt himself or assume responsibility and so on." If vocational education is to succeed in India, similar tests have to be devised and the necessary laboratory facilities created or improved.

A knowing and enthusiastic head is another factor. "The problem of occupational planning," says an expert, "is very difficult and complex because of the diversity of human callings which require quite different methods of investigation." In fact, any kind of systematic planning in the realm of economics, for instance, requires elaborate preparation and careful study; the need is greater in a subject like occupational planning. He must not only be an expert, but also an enthusiast with full self-confidence. Otherwise, it may not be so easy for him to progress satisfactorily. Then again, the man who thinks of launching out a scheme that involves an expenditure of several thousands of rupees, if not lakhs, not to speak of the welfare of the thousands of youngsters, must certainly possess vision, courage and foresight. If a third rate man of superficial study is to introduce a scheme, it can, at best, be only a hotchpotch, slipshod work of bungling and blundering.

Another essential condition is a good preliminary survey of the land and its occupations; for rightly has it been said, that the very worst friend of vocational education is he who collects the programmes of the most advanced, scientific educational institutions in Europe and America and presents them in his best literary style as models to be followed in India." Gentlemen, we all know that our conditions and traditions differ so radically from those of the western countries that any unmodified, wholesale adoption of the scheme is sure to fail. A

judicious or discriminate adaptation is quite necessary and this, of course, presupposes a comprehensive survey of the land and its people.

Even the best of the schemes, can remain as a scheme on paper only, without finance. And even a govt. can think of taking up any new scheme, only when its coffers are fairly full.

III

Let me now pass to the third part of my subject, and that is really the subject proper, and see how far, in each one of the above mentioned factors, our State is specially fitted to give a lead to the scheme. I believe, I am not at all exaggerating the situation when I say that perhaps, nowhere in India is the public opinion so strongly favourable to a scheme of diversified curricula in our secondary schools as in Mysore. Our people have fully realised the utter unsuitability of the present too literary a type of education for one and all, and hence in any scheme of vocational education to be introduced by the government, public support or co-operation is sure to be forthcoming.

Next is our benevolent and sympathetic govt. Generally speaking, it is only in Indian India or Native states that we can find an identity of interests between the government and the governed: in this respect, the people of Native states are more fortunate than their brethren in British India. It is needless for one to say, that nowhere in India—British or Indian—can we find a government so paternal and solicitous of the welfare of the people as that of H. H. the Maharaja of Mysore. That Mysore administration is a synonym for good government is a fact known to every one in India. This by itself is a very hopeful and encouraging factor.

Coming now to the third factor of industrial environment, the many government and quasi-government industrial undertakings of the State do certainly provide an adequate training ground for a large number of vocational subjects. Private individuals, out of jealousy, may hesitate to give the students full facilities for practical training: but this can never be the case with a government, as the very object of the government is to make its people as happy as possible. With the possible exception of ship-building and connected maritime activities and the manufacture of jute goods, I think that facilities exist in our State for almost all other industries and occupations that could be successfully followed anywhere in India. The long list of places to be visited, given on p-226 of the Reorganisation Committee Report, is by no means exhaustive; it refers only to the places in Bangalore. We have besides, the Iron, Steel and Paper factories of Bhadravathy, Sugar factory of

Mandya, Gold-mining in K. G. F. area, Electrical Engineering at Sivasamudram etc.

Take the question of Psychological Laboratory. The University of Dacca is the only other University in India that has got Experimental Psychology. The fact that the head of our Psychology Dept. is a Professor of International reputation is an additional point in our favour. I have, therefore, no hesitation in saying, that if at all vocational tests suitable to India, are to be devised, they have to be done in our State of Mysore only.

As for the ability of the Pilot who is to launch the scheme, even people outside our State are agreed in saying that in Mr. N. S. Subba Rao, our D.P.I., we have the best fitted man. Very few D.P.I.'s have made so careful a study of the subject from so many different aspects as he, and we have every reason to be proud of one, who possesses not only the requisite knowledge, zeal and confidence, but also some other qualities like initiative, broad outlook, foresight, courage—in short true statesmanship.

Coming now to the Preliminary Survey of the State and its people, Dr. Kini, the president of our Section, has done this work admirably well. Apart from the high encomiums showered on his book by local as well as foreign reviewers—even a high class journal of the type of Times Educational Supplement London had reviewed the book beautifully, in its columns some months back—a close study of the book is sure to convince even the most pessimistic sceptic that his book is a very valuable study. The thorough, careful and exhaustive way in which it has been carried out by Dr. Kini—himself a specialist who has made a study of the subject in the most educationally advanced country U. S. A.—has undoubtedly lightened the burden of our government to a considerable extent.

As for Finance, I won't say that our position is very satisfactory. We cannot certainly congratulate ourselves on a good surplus budget; but I believe you all will agree with me when I say that that ominous cloud of financial stringency has shown signs of its departure at an early date. The present cheapness of the money market itself is an encouraging factor. It is only a question of "where there is a will there is a way". If we press the matter with all the emphasis at our command, I am sure, government will take steps, at a very early date, to start at least a few vocational schools in the State, as an experimental measure.

Then again there is another favourable factor for us. Some progress has already been made in our State, towards what might be called

vocational education. Chapters II, III, and IV of Part II of Dr. Kini's book, give a succinct account of the progress so far made in Trade, Industrial, agricultural and commercial education in our State. So what is needed now is only an elaboration of the scheme that already exists, with a few modifications and adjustments, a proper coordination and re-grouping. In this, the State is certainly much in advance of other parts of India.

So, there is no reason why this Model State of ours, which has already set an example to British India in many a laudable scheme, such as, Electric installation, Compulsory state insurance, Rural development, Medium of instruction in High Schools, Large-scale irrigation projects, liberal aids to industrial enterprises, uplift of the Depressed and Backward classes etc., should not lead in this important educational reform as well. As most of the factors necessary for the success of the venture, are so fully present in our State, let us earnestly hope that before long, the well-thought-out scheme of the Reorganization Committee will be brought into force and that this State of ours will keep up its deservedly earned reputation of being the most up-to-date and progressive Native State of India.

Before I close this paper of mine, I just wish to point out a few of the shoals and rocks that are to be avoided. (1) Our progress has to be cautious and slow. (2) We must see that sufficient number of teachers of requisite standard and skill are trained before the introduction of the scheme on a fairly large scale. (3) Every opportunity must be taken to din into the ears of our young men the dignity of labour. They should be made to realise, in the words of the poet,

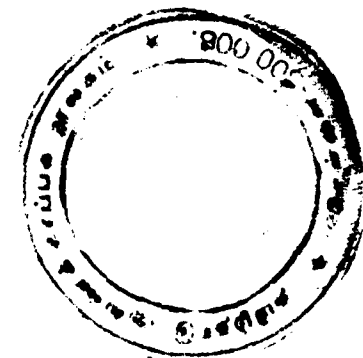
"If I were a cobbler it would be my pride
The best of all cobblers to be.
If I were a tinker, no tinker beside
Should mend an old kettle like me".

(4) As suggested by Mr. Amarnath Jaha, in his Presidential address of the All India Educational Conference, the University of our State should be persuaded to start cheap and short courses of study and to grant certificates and diplomas—as distinct from degrees—in some of the vocational subjects. (5) Lastly in our zeal for vocational education, we must not forget the fact that every man is to be educated, *first for life* and then only *for living*; that the finished products of our schools, should be men first, and skilled workmen next.

To sum up, I have tried to show, during the course of this paper of mine, that the most urgent measure of the hour in our country is to

save it from the appalling wastage of human effort and money and to improve the economic condition of the country; to plan "a chain of general and vocational education based on present knowledge of mental and physical development in childhood, adolescence and youth and on the varieties of the civil and occupational environment of the people; to give goodbye to "the present single-track curriculum of all schools leading all pupils to the bottle neck of high school education and entrance to the University; to diversify our curricula of studies so as to provide functional and realistic instruction, suited to environments, tastes and aptitudes of individual pupils; to remove the erroneous conception that every child who attends a high school has a right to enter the portals of the university.

I have put in a plea for vocational education—of course, along with a few cultural subjects—to be imparted in separate institutions; to try this, as a cautious experiment, at first in a few select centres only; to try to get the hearty cooperation of our industrial magnates and merchant princes; I have next tried to show that some of the necessary factors for the success of the scheme—such as a sympathetic government, favourable public opinion, an industrial environment, a well equipped psychological laboratory and zealous and knowing Departmental head, a thorough and careful preliminary survey of the land and its occupations, a scheme already in existence, fairly prosperous finance etc. are fully present in this State of ours. Lastly, I have drawn the conclusion, that Mysore State is the best fitted province in India to give a lead to this most important and urgent Educational reform and that it should be our proud privilege to be the first in this too, as in many other noble projects.



Some Problems of Secondary Education

By Mr. K. S. VENKATASUBBAN, B. A., L. T.

Secondary education is rightly considered as the most important stage in the education of pupils not only because it enables them to get a wider culture but because it leads them on to University education which is the highest form of culture that we can think of. Being an important step in the educational progress, it is full of problems awaiting the solution of educational reformers and administrators alike. In this article an attempt will be made to focus attention on some of the fundamental problems which must be tackled if our system of Secondary education should prove of any value.

DURATION OF THE COURSE

The first thing that has to be decided is the duration of the Course. By common consent this is fixed at six years, of which three form the lower secondary and three the upper secondary or high school course. But some educationists are of opinion that the dividing line should be drawn at the end of four years after the primary course instead of three years. This scheme has something to be said in its favour, first because it lengthens the lower secondary course, and secondly because it reduces the strain of the high school course, especially when there is public examination at the end of the latter. But the usual three and three years has numerous advantages so that it cannot be easily overlooked.

COURSES OF STUDY

The next thing to be considered is the Course of Study or the Subjects of Instruction. There is a general consensus of opinion that the Secondary school should give instruction in subjects such as English, a second language, Elements of Mathematics, Elements of Science and History and Geography. But there is great diversity of opinion regarding the inclusion of subjects like gardening, music, manual occupations and vocational training. Recent opinion, however, is in favour of including some at least of the latter subjects, though not from the cultural point of view, at least on account of their practical or utilitarian values. Hence all schemes for the improvement of secondary education must take cognizance of the existence of these subjects and make due provision for their inclusion in the curriculum of studies.

This naturally raises the question of the relative importance of the two groups of studies, the cultural and vocational. Once we grant that there must be a place for vocational or pre-vocational subjects, we must be prepared to consider their respective claims and the consequent

importance to be attached to either group of studies. Here the guidance given by the report of the Committee appointed by the Mysore Government to go into the question of the reorganisation of pre-university education is very valuable. In the opinion of the above Committee, the time given to the two groups of subjects—cultural and practical or vocational—must be as 2:1. Here of course a word of warning will be necessary. It must not be thought that the ordinary secondary schools are in any way expected to prepare pupils who are capable of taking up an avocation and earn their livelihood immediately they leave the secondary school. This is the work of special technological institutions for which our country is not yet ready. Hence our secondary schools must for some time at least rest satisfied with imparting what is at best only a pre-vocational or semi-vocational education.

MEDIUM OF INSTRUCTION

This again is a very vexed question which has raised great controversy. As some educationist has remarked, India is perhaps the one country in which this question has been discussed in all seriousness, while in other countries it is taken for granted that the mother tongue of the pupils is the best medium of instruction at any stage of education. However, even in our country opinion is slowly veering round and it may be safely assumed that the majority of educationists are of opinion that instruction at least upto the collegiate stage should be in the vernacular or mother tongue of the pupils. Of course difficulties will be experienced in provinces where more than one language is spoken by a large number of persons, in which case it would be hard to satisfy the claims of the several languages. But by suitable planning and a little of give and take the difficulty may be overcome to the benefit of all.

Speaking about the medium of instruction, one cannot forget the enormous expenditure of time and energy that is being made at present owing to the false glamour attached to a foreign language and the supposed benefits of instruction through it. Educational reforms and practical administrators have come to realise the real benefits of instruction through the mother tongue and it is to be hoped that ere long what is an anachronism will disappear and the vernaculars will be restored to their legitimate place as the vehicle of instruction in the primary and high school stages.

SPECIALISATION.

This is also one of the much debated topics regarding high school education. Some educationists are of opinion that the too early specialisation which is in vogue at present is fraught with evil consequences and that our pupils should therefore be led on through a gene-

ral course of instruction postponing the question of specialisation to the university stage. But others—and these are in the majority—hold the view that given the right subjects and the proper guidance at the time of selection, specialisation by itself will not be harmful to the students, but would tend to make the course more attractive and beneficial both to the teachers and the taught. Of course, there is no gainsaying the fact that most of our pupils are too young to decide as to what subjects they must select and consequently we come across many cases of misfits. The error can, however, be rectified if the parents and teachers give their valuable guidance at the right time and enable the pupils to make the right choice.

In this connection, it is also necessary to point out the evils of excessive specialisation. All specialisation pre-supposes a good grounding of general education; and until and unless a pupil is well equipped with this general education or education in the fundamental subjects up to a certain standard, his specialisation instead of proving a blessing will act as a handicap in his later life.

EXAMINATIONS.

The question of having one or more examinations during the Secondary stage of education is also a vexed one. Some authorities are of opinion that there should be only one examination and that at the end of the Secondary stage. But others are of opinion that it would be advantageous to have an examination somewhere about the middle of the Secondary stage i. e. about the end of the third or fourth year. Considering the great harm that is likely to be caused to the young minds by subjecting them to a severe strain at a premature stage, it is wise to postpone such an examination to as late a period as possible if we cannot altogether avoid it. On the whole it may be said that there should be no outside examination and that too of a mass type before the pupil is aged at least fourteen years. If such an examination could be postponed to the age of sixteen years, it would be all the better.

CONCLUSION.

As hinted at the beginning of this article, the aim of the writer is not to give satisfactory solutions to the many problems that are facing Secondary education to-day, but to point out the trend of modern opinion regarding them. It is earnestly hoped that these and other similar problems will be discussed—and many of them have already been discussed—in the educational conferences and satisfactory solutions arrived at. The problems are too big and too important, not to say too complex, to be disposed of in the course of an article. However, if they set people thinking, the much needed reform of Secondary education will not be distant.

Cavalry Training In Germany

The School at Hannover.

Its many-sided activities.

BY GENERAL FREIHERR VON DALWIGK ZU LICHTENFELS

Commandant of the Cavalry School at Hannover.

Every nation with a well-equipped modern military establishment has a cavalry school grounded on the best traditions of horsemanship which today constitute the basis of all modern cavalry training. What Saumur is to France, and Pinerolo to Italy, the Cavalry School at Hannover is to the German army and to German horsemanship.

This name is identified with all the traditions of German cavalry, with the illustrious prowess of German horsemanship, and with all of the great cavalry officers of the German army. It is at this school that all the problems connected with riding and with cavalry tactics are studied and solved, so that its history is the history of German horsemanship.

Having its origin in the Royal Military Riding Academy, where the elite of the 100 cavalry regiments used to assemble in their bright coloured uniforms of pre-war times, the school represents Prussianism and its high ideals of achievement, of manhood, and of devotion to the Fatherland.

The war destroyed or scattered most of the corps of cavalry instructors as well as most of the stock of cavalry horses. Out of the ruins of the old army, rose the new cavalry school attached to the 100,000-man army, and was re-organized through the arduous and energetic labour of its Command, General Seyffert. His successor, General von Kayser, devoted his efforts to improving the quality of the mounts and their training. In open riding tournaments, the Hannover Cavalry School achieved its first great successes when General Freiherr von Seefeld was Commandant. Later, General Preusser established regular stables for mounted sport and for all-round military riding. The School attained its international reputation in equestrian sport under its present command.

The excellence reached by the cavalry of other nations served both as a stimulus and an example to the military horsemanship in Germany. Useful knowledge was gleaned from the

unusually fine horsemanship displayed by the Cavalry of France, Switzerland, Italy, and Sweden.

No event has taken place for years which was anticipated with more interest or welcomed more heartily than was the first visit to Berlin of the French cavalry team. Its equestrian prowess helped to rouse the ambition of the German cavalymen. The resounding applause and the hearty reception with which the French cavalymen were greeted at the last military tournament in Berlin is but another proof of the feelings of friendship which the people of Germany have for their western neighbour, as well as their sincere admiration of the superb horsemanship of the French cavalry.

The main function of the Cavalry School, now as formerly, is the training of officers and non-commissioned officers in a two years' course of schooling to be instructors to their respective troops. The splendid exhibitions of horsemanship made by the most expert riders mounted on picked horses, have never failed in their inspiring effect on all those who are interested in riding. The experience and training required for these public exhibitions of equestrian prowess have all served to raise the general standard of horsemanship in all its branches. One result was the establishment of regular tournament stables at the Cavalry School. These together with the training stables, the jumping stables, the strictly military stables, and the racing and hunting stables, have all helped to develop good riders to attain an unusual degree of expertness in all kinds of riding. The fundamental principle is always the same; namely, to develop a thoroughly trained and carefully drilled horse, and to teach the rider to have a good seat. The course of training in the cavalry is supplemented by exercises on tournament mounts, and this accounts for the fact that the visitor to a German riding tournament will always notice that the same method and style of riding and jumping is followed in the cavalry troop as among the expert riders in the school.

The Cavalry School is divided into several departments.

Department I embraces the newly commissioned cavalry officers and is devoted to their training. The Senior "Faehnrichs" (non-commissioned officers eligible for commissions) are given a course of instruction to prepare them to become

cavalry officers, and when they have completed this course, they are assigned to a troop with the rank of lieutenant.

Department II takes in those receiving instruction in horsemanship, and is divided into a riding-school for officers, and one for non-commissioned officers. Generally, the pupils at this school are trained for two years in every branch of riding used in the cavalry. Their horses on the average are better trained than those used in the troop, and are mostly drawn from the stud-farms of East Prussia and Hannover. In the Autumn, the Members of this school take part in the hunting.

Department III is to train instructors in driving for cavalry as well as for tournament purposes. Driving as a sport enjoys a great deal of popularity in Germany, so that at almost every equestrian tournament especially those held in rural localities, there are driving contests and exhibitions. Instruction is given in driving every sort of them which is now in use. The method of instruction in driving is based on that employed by the famous expert Benno von Achenbach. In the art of driving, therefore, as well as riding, the Cavalry School is a very important factor.

Department IV includes all of the tournament stables above mentioned. The first of these is the training stable, which includes among its famous "show" horses, "Absinth", "Fels", "Germane", "Gimpel" etc. The training stable is run according to the classic method of breaking-in and training, and is in charge of Lieut. Colonel Gerhard, who won the Silver Medal at the recent Olympic Games. The mounts used at this school are almost exclusively of German stock. With the exception of a few thoroughbreds, most of these horses come from Hannover or the Trakehnen Stables.

THE STABLES FOR JUMPERS AND GENERAL VERSATILITY.

Nothing has done more to promote the entire development of equestrian jumping in Germany than the accomplishments of the Cavalry School in this branch of horsemanship. The training methods have been thoroughly worked out into a perfect system. They are the result of the labours of well-known international tournament riders, one of whom, Captain (Rittmeister) Momm, was placed in charge of the stables last Fall. This method of training, which has also been used for years in the cavalry in

connection with the breaking-in of jumping-horses, has enabled the cavalry school to draw upon a sufficient number of well-trained young officers to take the place of those returning to join their troops. In wintertime, the training is carried on in a large riding ring, 100 meters long by 25 meters wide, in which everything connected with "parcours" can be held without any difficulty. On the outdoor riding-field, all kinds of hurdles and other obstacles are arranged for single and combination jumps. The School also has at its disposal a large tract of land outside the city, where also the hunting stables are located. On this tract all the various forms of jump used in steeplechasing have been built, the natural configuration of the country being well adapted to training jumpers and hunters. The horses used here are all well-trained and tried out. They are first broken to be absolutely bridle-wise, and then are started on learning the low jumps. Only when a horse has mastered these and the several kinds of combination jumps, is he tried at the more difficult tests.

In the riding stables, young officers are trained in the art of riding a race, and this training has been a great stimulus to gentleman jockey riding and the sport of horse-racing. The Cavalry School is well represented in this branch, and has made excellent records in the large hurdle races and steeple-chases.

Nearly every one of the successful gentleman riders of recent years has been a graduate of the School.

The hunting stables has charge of the training of hunters and hounds throughout the Autumn, a hunt is held twice a week. In these events both horse and rider are given a strenuous task to perform. The great event of the season is the so-called "Hubertus Hunt", in which from two to three hundred huntsmen and huntswomen take part, there being always a large gallery of spectators.

Germany, like every other nation with horsemanship traditions, requires modern army, horse-breeding facilities which are capable of furnishing this army with an adequate supply of efficient cavalry horses, and a center where German horsemanship may find expression and continue to develop, as well as to represent the nation in international riding. This classic center of German horsemanship is the Cavalry School at Hannover.

Notes

The Coronation.

We heartily offer our most respectful congratulations and our loyal greetings to the person and Throne of His Imperial Majesty on his coronation. Imbued with lofty ideals of service and trained by his illustrious father in the path of constitutional rectitude, His Majesty is now at the helm of the greatest monarchical empire, and he is certain to prove the pride of the realm dedicating himself to the cause of human welfare and championing liberty, peace and goodwill among mankind. We join our countrymen in their prayer that God may shower upon him His choicest blessings and endow him with long life, health, glory and prosperity.

The Tanjore Educational Conference.

The Provincial Educational Conference met at Tanjore in the first week of May and had a successful session presided over by Sjt. C. Rajagopalachariar. Sectional conferences organised by the Geographical Association, the Physical Education Association, and the Pandits' Association also contributed to make the programme full and varied in interest. A Refresher Course for Elementary school masters enhanced the value of the annual gathering. In spite of the warm weather, the attendance of delegates and visitors was good, and valuable work was done during the session by reaching well-considered decisions on the Re-organisation of Secondary and Elementary Education.

THE PRESIDENT.

The teaching profession should consider itself lucky in having secured the services of Sjt. Rajagopalachariar. Teachers had an opportunity to know him intimately and learn how deservedly he had been acknowledged as the leader of the people. A shrewd lawyer of deep erudition, tact and critical acumen, he proved a very able President. Members of the Subjects Committee, more than others, had the occasion to learn of Sjt. Rajaji's remarkable powers. They could easily see how he was fired with a zeal to acquaint himself with the various problems of the teacher and his time-honoured ills; how he could sit till a very late hour in the night studying and examining the resolutions and clarifying the

issues with unrivalled insight and sympathy, grasp and vision; how he was able to guide and shape the proceedings, giving the discussions the benefit of his wide experience, practical wisdom and selfless service. Sjt. Rajaji was simple and clear in his views and expression, at times spicing his utterances with gentle humour and sarcasm, unsparing and fearless in his criticisms, and overflowing in sympathy. The S. I. T. U. had many knotty questions to solve at the Conference which, but for the remarkable lead of the President, might have fared with indifferent results.

EXAMINATIONS

One of the controversial questions arising in the course of the discussion on the Re-organisation of Secondary Education was the desirability or otherwise of having an external examination at the end of the school stage. The S. I. T. U. stood for the ideal, as it should, and it was right in its demand for its discontinuance in the circumstances that were to obtain in the new scheme. But its radical view seems to have been far ahead of the times, and so opinion was divided, those for its retention winning the day. But as the President remarked, teachers 'need not imagine that the subject was disposed of one way or the other. The fort had been breached, and those who voted for the demolition of the examination incubus had succeeded, because the sacredness of the examination had been removed and the thing would crumble to pieces in the near future. It might no doubt go on for some time but with very apologetic existence. Persons who had voted for the examination did so not because they respected the examination but because they scented danger in a change in transitional circumstances like the present. It was a sort of conservative terror.' The fact is that the majority of teachers hold the view that while other countries tolerate examination as a necessary evil our country is not advanced enough to steal a march over others. Another factor to seriously consider is the competency or otherwise of the teacher to act conscientiously in the existing service conditions. Delegates had, probably, this aspect of the matter in their mind when they voted for its retention. The tale of the B. Group subjects in the years gone by might have been green in their memory, and they did not, probably, wish to be fettered with the exercise of discretion or responsibility.

THE MOTHER TONGUE.

The use of the mother tongue for the teaching of non-language subjects was approved by the Conference. This has been done year after year, and yet most of the schools seem to be where they were. The Conference was probably unaware at the time of the move of the Teachers' College Model School at Saidapet to give up the reform introduced. The public would expect a Govt. Model School to carry out experiments in teaching methods on progressive lines so that others might emulate it. The present action at Saidapet would show how far teachers could expect sympathy and co-operation from the Department and the public in popularising the vernacular medium. As the President remarked, the wastage and stagnation that the Govt. was speaking of was really here, 'the continuous wastage involved in using a foreign language for teaching knowledge subjects'. We hope wiser counsels will prevail.

VILLAGE TEACHERS.

The President expressed an opinion both at the Workers' meeting and at the open Conference that in the Govt.'s attempt to conserve the resources for the uplift of the poor masses even constables' services would have to be requisitioned for fighting illiteracy. True, even constables may have their own place as aids for the spread of education. But many teachers seemed to entertain a sincere doubt whether the President really thought and was convinced that constables could efficiently discharge the skilled work of trained teachers and supplant them, if need be, when their services were available on off-duty. We hope Sjt. Rajagopalachariar would not have meant so, as we have reason to gather from his recent utterance at Madras. Teaching, as knowing people will admit, is an art, quite as technical as—perhaps, as some would hold, more than—politics. It is not all, however academically qualified, that can 'educate' in the real sense of the word. Sjt. Rajaji had spoken truly when he remarked 'Though a man constructing a house knew that a doorway was necessary, only a carpenter could make the doorway'. We trust he would concede that what is true of politics is also true of teaching.

Reviews

1. **Kolam Series:** By P. V. Jagadisa Ayyar: Oxford University Press, Madras. Books I to IV.

People are quite familiar with the Kolam designs of our girls and ladies at home, but very few know and appreciate their value as an Art. The rhythmic patterns drawn with a few pinches of rice flour, sometimes coloured, convert our commonplace hut and house into homes of beauty. A regular exercise in drawing them is of great educational value in that they give a training in free-arm and free-hand drawing. The designs generally relate to life unlike the fantastic figures indulged in in the drawing classes of schools, and they will tend to develop the creative and aesthetic sense of girls. Inclusion of this subject in the curriculum of girls' schools will make their education practical.

The designs are graded in difficulty. Each exercise has three parts, the first denoting the placing of points, the second how they have to be connected together and the third the final formation. The name of each design is given in six languages. Blank space is allowed opposite to each for the practice of the drawing.

We commend the use of the series in all girls' schools.

2. **Hands and Feet:** By Swithin Roberts, Macmillan & Co., Ltd. Price: 3 sh.

This is an interesting detective tale centering round a modest, observant and skilled policeman Abd-el-Aziz. The police are out to crush the vice of Dope in all its forms. Smuggling of this commodity is a common trade, and the young detective has to act intelligently to book the offenders. He learns that the hands and feet of the smuggler betray him, and so has a careful eye on them. The plot unfolds itself naturally. The language is simple and idiomatic with a delightful literary flavour. The book has a few apt illustrations and is neatly got up.

Books by Longmans, Green & Co. Ltd., Madras.

3. **பூகோளவியம்—இந்தியா; வாக்மென்ஸ் பூகோளவியம்—Books I, II & III.** By L. D. Stamp. (Tamil Edition) Price: India—10 As. Book I—10 As. Book II—12 As. Book III—12 As.

These descriptive geographies conform to the departmental syllabus and are admirably suited to the needs of the lower secondary forms. The human element, the play of nature on man and of man on nature, has been kept in view. The contents being based on the first-hand knowledge of the author, are of great interest and value. The treatment in all the books of the series is direct, clear and simple, care having been taken to present only facts

of outstanding value which could give the right perspective. Pictures, maps and diagrams are in profusion. Each section is followed by a set of useful exercises. The get-up leaves nothing to be desired. The language of the translator is lucid and simple, free from pedantry.

4. **வாக்மென்ஸ் இந்திய சரித்திரக் கதைகள்; வாக்மென்ஸ் இந்திய சரித்திரம்.** Books I, II & III. By M. K. Sundaravardachariar, B. A., L. T. Price: As. 5, 6, 8, 10 respectively.

Books on Indian History for youngsters need to present the essentials such as will conduce to inspire in them a love for the sacred past and an interest in historical studies. The contents, too, should be free from distortions and conform to the latest historical researches. The author with his long teaching experience has kept these principles in view and brought out a useful series, exhibiting a judicious arrangement in the presentation of matter. Teachers and pupils will appreciate the simple and homely Tamil in which he has clothed his ideas, and the useful maps and pictures he has included. Types have been varied to suit the different classes, and the get-up is good.

Stories from Indian History present a variety of matter to children which brings out the greatness of Indian men and women in the realm of patriotism, courage, moral, spiritual and intellectual attainments. Prominent ideas have been printed in bold type to attract the young readers' attention. The others of the series contain matter conforming to the syllabus, which makes delightful reading.

5. **வாக்மென்ஸ் தமிழ்ப்பாடம்:** By M. V. Ramanujachariar, Price: As. 2½, 3, 4, 5, 6 respectively.

These attractive booklets form a series of interesting Tamil Readers for the five standards. The matter throughout is in chaste, faultless Tamil, illustrated with pictures and colour plates. The topics introduced are varied and associated with life. Some parts of Tamil Grammar are here and there taught in the form of dialogues. Familiar Tamil poetry and proverbs suited to the standard have been included, with short notes on the former appended at the end in Book V. An attempt has been made by the author to approach the new method of teaching, giving the new words learnt and setting a few exercises at the end. More opportunity could have been given for drilling the vocabulary by studied repetition in the course of the reading matter. Book I forms the Tamil Primer for beginners. The alphabet is taught in order by means of words and pictures, opportunity being given for drill in the letters and sounds picked up. All the books are well got up.

SAMPATH PRESS

398, North Masi Street
Madura

QUALITY PRINTING

CHEAPNESS

NEATNESS

PROMPTITUDE

SECRECY

ACCURACY

RELIABILITY

Undertakes

All kinds of Jobs, Printing of question papers, Letter heads, Hand-bills, Supply of all School and Office requisites.

UNDER THE EXPERT SUPERVISION
OF

MR. V. ARAVAMUDA IYENGAR, B.A., L.T.,
Managing Editor, the Indian Educator,
Madura.

Patronage solicited

SADHANA AULADHALAYA Dacca, Bengal

LEADING MANUFACTURER OF PURE & GENUINE AYURVEDIC MEDICINES.
CONTROLLING PHYSICIAN-ADHYAKHA-DR. JAGES CHANDRA GHOSE.
AYURVED-SASTRI, M.A., F.C.S. (LONDON), M.C.S. (AMERICA).
FORMERLY PROFESSOR OF CHEMISTRY, BHAGALPUR COLLEGE.

Other Branches: Shyam Bazar, Calcutta, 213, Bowbazar Street, Calcutta,
67/4 Strand Road, Calcutta, Chittagong, Patuatuly, (Dacca), Lahore,
(Punjab) Burdwan.

Guaranteed absolutely Pure and Genuine Medicines, prepared strictly
according to the Ayurvedic System. Catalogues are sent free on application.

On describing the nature of diseases, prescriptions are given gratis with
great care.

MAKARADHWAJ (Swarna Sindur), (Pure & with Gold) Rs. 4 per tola.
A wonderful specific for all diseases. It regulates the nerve, bile and phlegm,
increases vitality, mental and physical vigour and tones up the system.

SARIBADISARSA. Rs. 2-12 per seer. A wonderful, infallible medicine
for all sorts of blood impurities.

SUKRA SANJIBAN. Rs. 16 per seer. A very powerful and effective
medicine for the restoration of lost vitality and energy. It immediately puts
into you all the vigour that every man should have.

OUR SCHOOL PUBLICATIONS

1. Garuda and Anjaneya	....	....	0-4-0
2. Avatars of Vishnu	....	....	0-4-0
3. Jesus Christ	....	....	0-5-0
4. Tales of all Time	....	....	0-6-0
5. Rama, the Ideal Son	....	....	0-4-0
6. Aesop's Fables I	....	....	0-3-0
7. Do. II	....	....	0-4-0
8. Karna, the Warrior	....	....	0-6-0
9. Stories from Shakespeare	....	....	0-12-0

SUITABLE FOR HIGHER FORMS.

1. Tamil Poetical Selections	....	....	0-5-0
2. Nitthilakovai—a collection of Tamil Poems....	....	....	0-10-0
3. Selections from Prose & Poetry in Tamil Book I	....	....	0-10-0
4. Do. Book II	....	....	0-10-0

Write to:—

V. S. SWAMINATHAN,
Publisher,
MADURA, TINNEVELLY & MADRAS.

ELEMENTARY SCIENCE SERIES (S.S.L.C.)

BY K. S. RAMACHANDRA IYER, B.A., L.T.,

Senior Science Assistant, Town High School, KUMBakonam.

Approved by the Text Book Committee.

- *1. A Text-book of Elementary Science Book I (Physics & Chemistry)
by K. S. R. and G. V. Re. 1-0-0
- *2. A Text-book of Ele. Science Book II (Animal Life) 0-6-0
- *3. " Book III (Plant Life) 0-6-0
- *4. " Book IV (Sound, Light,
Magnetism, & Electricity) 0-8-0
5. " Book V (Physiology & Hygiene) 0-8-0
6. Practical Physics C. Group (Heat & Light) 0-7-0
- *7. General Science for Form I (Tamil) ... Re. 0-7-0
8. General Science for Forms II & III will be ready shortly
- *9. A Text-book of Physics S. B. L. C. C. Group, Book I for Form V 0-14-0
10. Do. Do. (Heat & Light) ...

For Copies apply to:-

THE AUTHOR.

Problems In Elementary Mathematics.

In Tamil For Forms I, II and III.

By M. RAMAKRISHNA AIYER, B.A., L.T.,

AND R. RAMAKRISHNA AIYER,

Assistant Masters, St. Michael's High School, Coimbatore.

PRICE Rs. 1-4-0 (only.)

A Highly useful Text Book for the Lower Forms
prescribed in several Schools in the Presidency.

Approved by the Text Book Committee. Apply to the Author.

The South Indian Teacher.

The official journal of the South India
Teachers' Union.

The only Educational journal devoted
to the teacher and his problems. Best
medium for advertisements.

Rates can be had on application.

Annual subscription Rs. 8.

Apply to:- Manager,
41, Singarachar St., Triplicane, MADRAS.

A TEXT-BOOK OF Elementary Mathematics

BY

V. P. Viswasatha Ayyar, B.A., L.T.
St. Mary's High School, DINDIGUL.

Book I for Form IV	As. 14
Book II for Form V	As. 12
Book III for Form VI	As. 14
Text-Book of Algebra	Rs. 1
" Part II	As. 12

BHARATHA DHARMA.

Published on the 15th of every Month
A Magazine of Liberal Hinduism
The Official Organ of the Arya Mata Sabha

Editor:

MR. K. V. SETHA AYYANGAR.

Best Medium for advertisement.

Apply for rates to the Manager.

BHARATHA DHARMA
"Moryalaya", Royapetta, Madras.

Dr. G. B's. Medicated Snuff.

Acknowledged to be the best throughout
India for Neuralgia, Nasal Catarrh, Tooth-
ache, etc., etc., Guru Basava & Co., Ltd.,

P. O. Box No. 510,

PARK TOWN, MADRAS.