



JL
Tm2,M95
N22.28
166723

16672-3

359

The Educational Review

A Monthly Record for India.

VOL. XXVIII.]

JULY 1922.

[No. 7.]

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

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

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

THE SECOND SOUTH ARCOT TEACHERS' CONFERENCE HELD AT VILLUPURAM.*

EVERY one of us is aware that our country is passing through a transitional period in its life, political, social and in every sphere of activity. It is only two years since the Reforms have been set on foot. The political consciousness of the people has already developed to such an extent as to demand for more reforms. The circumstances indicate that the goal would be reached sooner than it was at first thought. The resolution recently passed by the Imperial Legislative Assembly to the effect that a Joint Committee of Parliament should be appointed to inaugurate a fresh instalment of reforms without waiting for the ten years' term fixed by the Act of 1919 is an index

of the popular mind. But what about the progress till now made in the field of Education? If there is in India a branch of administration which has been admittedly a failure, it is Education. The Educational policy which our Government has been pursuing in the past has not been a success. Since the time of the famous Despatch of 1854, from when, it can be said, the modern educational system commences, the powers that be have been going on making experiment after experiment with no definite and sound system of education. Though it was recognised even at such a distant date that education has stronger claims on the attention of Government yet the Government of India had to confess in their Despatch of 1919 that the educational policy they had till then pursued was erroneous and the system adopted defective. Education is the highest want of India and yet her needs in that direction had not been duly and

*Villupuram Address by Mr. K. Sitarama

A., B.L., M.L.C.

XXVIII.—61

adequately considered and provided for. A good deal remains to be done both as regards the extent to which education has to spread in the country and the kind of it that has to be imparted, before we can pronounce its condition to be tolerable for a civilized and progressive country like India. Compared with the huge population of which we can feel proud the number that can be said to be literate is very small. Many are the places where the torch of knowledge has not yet been carried to dispel the dense darkness of ignorance that surrounds them. As for the kind of education that has been in vogue these long years it was all one-sided with the inevitable result that there is at present in our country an army of half-educated youths struggling for life without even a hope for a means of honest livelihood, and ill-suited to carry on the ordinary avocations of their own class of life. What a waste of economical value to the State! Can a country like India whose vast industrial regions still remain unexplored and whose agriculture, trade and commerce stand in need of an immense development, afford such a waste? And yet, this is the inevitable result of a policy which has been persistently followed by the State in regard to Education these very many years. But it is satisfactory, however, to note that with the ushering in of the Montford Reforms a new era has dawned upon the hitherto halting progress of our country. The subject of education has been transferred to Indian hands. An Indian Minister has been entrusted with the portfolio of education. We earnestly hope that this vital subject which had not received up to now, that amount of attention and care which was due to it will occupy the foremost and the immediate attention of the Government.

The system of education as it now obtains, requires wholesale reconstruction. Every department of it needs over-hauling. The task however requires considerable foresight and vast experience. We are happy that the Government of our Province has chosen the right man for the place. The present Minister of Education has real enthusiasm for the cause entrusted to him. There is no doubt that under his wise guidance and with the help of his expert knowledge the various pressing problems of the hour will be solved suitably to the condition of things obtaining in our Province. He has already set to work in right earnest and is now engaged in reconstructing the various grades of education from top to bottom. He has already drawn up his University Bill, the draft text of which is being published in the several dailies of Madras. The Bill proposes to convert the existing University which is mostly an examining body into a teaching one. Whatever might have been the justifying circumstances which led to the creation of our University in the early fifties, things have considerably changed since making the establishment of a residential and teaching University an imperative need. This reform was long overdue. The Bill however does not seem to favour the idea of a "Unitary University." The system of having all teaching centralized under the direct control of the University is in its very nature bound to be productive of greater good to the country than a "Multi-collegiate System." Out of such a centralized organization will come out scores of young men, who will be better disciplined, imbued with a greater spirit of self-sacrifice and animated by a more wholesome feeling of brotherhood. The opportunities which under such a system of

University education must necessarily occur for students of different shades of opinion and social status, to come into contact with each other, and for the teachers and the taught to meet on a common basis would certainly produce such an influence on the students coming out of the portals of the University as to make them real national assets.

I presume, you have all read the report of the Educational Reorganisation Committee appointed by the Government in October 1921 "to consider in the light of the recommendations of the University of Madras the applicability of the report of the Calcutta University Commission to South India and to make suitable recommendations to Government." The Committee's deliberations were mainly confined to find out ways and means as how best Secondary Education could be reformed with advantage. If India is to advance and rise in the scale of nations, she must possess a sound system of Secondary Education. For it is that education that is a panacea to all ills, social, economical, and industrial to which she is subjected. It is satisfactory to note that the proposals made by the Reconstruction Committee, in the matter of reforms to be effected in the system of Secondary Education tend to make it more useful, practical and national. They have proposed that the vernacular should be the medium of instruction in the Middle schools and the ultimate ideal in the High schools. Ampler provisions have also been made for instruction in manual training and in vocational subjects. The importance of the use of the vernacular as the medium of instruction was recognised as early as 1854. The authors of the Despatch of 1854 laid down even then that "in any general

system of education the English language should be taught where there is demand for it, but such instruction should always be combined with careful attention to the study of the vernacular language of the District and with such general instruction as can be conveyed through that language." The recommendation however remained as usual only as a pious recommendation up to now. We are now assured that the vernacular will be given its due prominence in the scheme of Secondary education as at present drawn up. If knowledge should spread among the people it stands to reason that the mother-tongue would be the best and surest method for the diffusion of the same. While recognising however the importance and the necessity of having the vernacular as the medium of instruction I feel at the same time that we have to guard against a pitfall which such a system might inevitably lead to in the long run, in a country like India where a great number of languages and dialects are spoken. Language is one of the few factors and agencies that draw a people closer to a bond of union and cement their national ties. With such a diversity of languages and interests as are found in our country there is every need from a national point of view, to narrow down the cleavage that exists in the ranks of our countrymen due to the spirit of exclusion engendered among others, by the influence of the variety of languages used and spoken and to aim at national unity and affinity by the adoption as far as possible of one vernacular as the language of the country. An undue insistence on the use of the vernacular without making adequate provision at the same time for converting in due course one vernacular as the language of the country, may—I am afraid, would—lead to the provincializa-

tion of the country's interests more and more. I would advocate therefore that steps may be taken even from now to make one of the most popular of the vernaculars as the language of the country by making the study of it compulsory.

The course of study prescribed is all round. Facilities have been created for the imparting of vocational education which has now been made as part of general education in Secondary Schools. On the successful progress of this programme of work depends the solution of the industrial, economical, and agricultural problems of our country. There is no good however stopping here. Higher technical institutions and technological colleges should be established in good number so that the study of technical and industrial subjects commenced in the Secondary schools might be continued and perfected, by those who are willing and can afford to do so.

You will be interested to note that the Committee has also found that the position and prospects of the members of the teaching profession are anything but satisfactory. In so finding the Committee has done you nothing but the barest justice. It was a long-standing grievance of your profession that your lot always remained neglected and did not receive at the hands of the authorities concerned such consideration and attention as it was entitled to. There can be no doubt that the teaching profession is one of the noblest professions and at the same time one with heavy responsibilities. It is in the school-room that the future citizens of the State and the members of society are moulded and shaped. The more the country advances along the road to responsible

Government the heavier becomes the responsibility of the teaching profession. It is not reasonable therefore that with increased responsibility on one side and increased cost of living on the other side the pay and prospects of teachers remains the same. Further, for any profession, to command respect, it must possess a status. If the position of a teacher will not infuse feelings of respect in the minds of others, it is difficult to find impressed in the products turned out by such a teacher, a sense of the dignity of labour and feelings of respect for men and things. The best type of men may not feel attracted to a profession which commands neither prospects nor status. As for those that take up to it under forced circumstances they may not feel that amount of zeal and enthusiasm which is necessary for the advancement of any cause. The labours of your Guilds and Associations have not been in vain. They have succeeded so far as to elicit the sympathy and co-operation of the discerning public. I dare say that the amount of public opinion which you have already gained would necessarily produce its beneficial effects on the mind of Government. The Government must soon come to realize that if there should be any living scheme of Education, Primary or Secondary, two things are necessary, *viz.* (i) the agency employed should be of the best kind and consequently (2) a decent living wage should be guaranteed for them. In our own district we held recently a Conference of Secondary School Headmasters and Managers and decided therein to raise the present scales of pay of the teachers. I do not say that the scale we have fixed is not capable of being further revised. But unless the Government makes a forward move in this matter and comes in with a liberal grant of money,

it is not possible for Local bodies and Municipalities with their limited finance, to do full justice to your claims.

The Education Committee did not consider the subject of Primary Education as it was not covered by the terms of reference of the Government Order and as it was not necessary or desirable. In any scheme of wholesale reconstruction and remodelling education it was not reasonable that Primary Education which forms the foundation on which the whole educational edifice is constructed should have been left out of consideration.

Nor can it be said that the state of affairs in that grade of education needs no reformation. At the time when constitutional changes are aiming at a democratic form of Government, the education of the masses becomes all the more important and necessary. For to use the words of the Government of India it is "the Nursery for the broad and enlightened electorate on which the future depends."

With the passing of the Elementary Education Act the Government probably think that the problem of mass education has been solved. The mere creation of Councils for each district is no cure to the defects if the Government will continue to hold the purse tight. Unless and until the Government makes a forward move and adopts a policy of systematic financial assistance there is not much hope left in the matter of expansion of Elementary education. The Elementary schoolmasters are ill-paid and command little or no respect. Their quality in most cases is very poor. As in the case of Secondary school teachers, the pay and prospects of the Elementary teachers also should be improved. The

money that is now annually spent on the so-called teacher-managers by way of Grant-in-Aid is not well spent. I am of opinion that a large part of it is waste. The system of aiding private schools which are not run by responsible bodies such as Trusts, Charities, and Missions should be done away with and all such schools brought under some responsible management and should be subjected to systematic and constant supervision and inspection.

As for the nature of instruction imparted, if it be not possible to give effect to the suggestion of the Education Committee, that the existing distinction between Primary and Elementary education should be abolished, changes in the course of studies may at least be made in the highest standards of Elementary schools so as to afford facilities to rural pupils to go direct to the next higher stage of education.

Even with all these reforms it cannot be expected that in a country like India, the bulk of whose population is yet supremely indifferent to the practical value of education, mass education will spread in any large scale. In spite of their enlightenment and civilization, the Western countries could not succeed in extending Elementary education without having recourse to compulsion. England which stood against any sort of compulsion was forced even at the time of her most liberal statesmen, to educate the mass of her countrymen through compulsory legislation. Our country cannot in its very nature, be an exception to the rule. If our industries should progress and our people advance economically, socially and politically, Elementary education must be made free and compulsory. Our Minister of Education, with his wonted zeal and enthusiasm, is now

engaged in the task of introducing compulsory free education in the Municipal areas. Here is an opportunity, nay, a duty for all of us teachers or non-teachers. As teachers you can do much in the direction of preparing the ground and paving the way for the introduction of compulsion in your limits. Your Guilds and Associations can be of great use in this matter. While endeavouring to safeguard the interests of teachers, your Associations can prevail upon the respective Local bodies and Municipalities to levy the cess required under the Act even at the risk of incurring popular odium. Individually, if every one of you can bring your influence to bear on the rate-payers and the leading men of villages and make them realize the benefits of education and submit themselves cheerfully and willingly to a taxation which would be productive of the highest good to the country and to themselves, you will have the genuine satisfaction of having done your duty by your country and its people. Compulsion should not be confined to boys only but extended to girls also. For any system of education which does not take into account the advancement of women must necessarily be one-sided and defective. The welfare of any nation depends on the efficiency of both its men and women. A vehicle, one wheel of which is strong, made of sound materials, cannot run with its load far on the road of progress if its other wheel is weak and is made of useless material. So, then, education of our women is equally important.

You are aware how pernicious has been the effect of the preaching of Non-Co-operation on the school boys. I do not however propose to tread on that controversial ground to-day. But on an occasion like this, I cannot avoid inviting your atten-

tion to the woeful fact, how, at a time, when every one of us, whatever be his political views, is bound to see to the spread of education among our youths, some of our countrymen are actively engaged in the suicidal policy of drawing away young men from the school and making them moral wrecks. Here also therefore there is a splendid opportunity for your Associations to serve the country at large and to do your duty by its children by saving them from falling victims to the preaching of the pernicious doctrine. Those of you who have the time and energy to spare may carry on the useful work you are doing within the school-room, even outside of it. You can carry knowledge to those adults in the village who have not seen the light of it nor had the advantage of school education of any kind. This indeed would be a work of love—a work which would go its own way to uplift the moral and material welfare of the less enlightened of our countrymen. These are some ways by which your Associations can make themselves useful to the general public. As already stated if India should become efficient, all round, it can be only through education. Educationists as you are, you have the greatest chance and opportunity of helping towards the progress of our country. You may have read in the papers that one Mr. S. Ven V. Knudsen of Denmark is on a tour of the world engaged in investigating the various educational methods in use in different countries. Mr. Knudsen is but an Assistant Headmaster of the State School of Copenhagen. Denmark has one of the best Educational systems in the world. Yet he says his countrymen are continually striving to perfect it; for it is through education the people of the land may make something of themselves and increase the efficiency of the State. Such should be the idea and spirit which must actuate men of your noble profession. Not one but hundreds of Knudsens must spring out of your ranks and Associations. Unless we cast our vision beyond the sphere of our self and play each one his part in the general amelioration of our country in a spirit of self-sacrifice without which no cause however noble will succeed, the progress of our country is bound to be slow.

THE ANDHRA UNIVERSITY : INTERMEDIATE AND SECONDARY EDUCATION

BY

MR. G. SATYANARAYANA MURTI, M.A.,
Parlakimedi.

II. *Intermediate and Secondary Education*:—These must be so organised on the main lines of the Sadler Commission Report as to serve the double purpose of training students who will qualify for admission to the University in all its ordinary faculties or into other institutions for higher or technological training or students who after completing their Intermediate course will proceed direct into various practical occupations. The establishment of Intermediate Colleges of the type contemplated by the Calcutta University Commission Report has everything to recommend its adoption by the Andhra University provided the needs of general culture are not starved and provided satisfactory arrangements are made with regard to the preliminaries to sound vocational training. The present arrangement of a miscellaneous crowd of students, many of them unfit for collegiate education and yet struggling frantically for admission into the portals of higher University education in spite of their natural practical bent of mind—this unnatural phenomenon should cease in the interests of the economy of our national life. The medium of instruction in the school course should be compulsorily in Telugu though English is to be studied as a second language and translation from English to Telugu and from Telugu to English should be scientifically cultivated from the beginning of a student's scholastic career.

University education proper should begin with the B.A. course and what might corre-

spond in the Andhra University to the present Intermediate classes of the Madras University should be transferred to a Special Board called the Secondary and Intermediate Board representatives of the Public Instruction Department, heads and other Special Assistants of the new Intermediate Colleges or Collegiate High Schools, and the University and non-official public leaders. The University might insist on the students satisfying the test of an Entrance Examination before admission into the University courses of study. The course of studies necessary for this examination may be taken up in the last year of the pre-University class. This examination must be conducted under the joint control of the University and the Secondary and Intermediate Boards of Studies. The present S. S. L. C. must go or accommodate itself after radical alterations to the new Entrance Examination of the University. There should be special test examinations provided to test the students' capacity to take up particular higher courses of vocational training under the auspices of the University. There must be a statutory provision to the effect that every Second-grade College and High School at present wishing to be raised to the status of an Intermediate College or Collegiate High School should equip itself with facilities for vocational training in at least three or four departments before recognition can be given by the Secondary and Intermediate Education Board.

This Board should, as already hinted, be thoroughly representative and above all suspicions of slack work and unmeaning high-handedness. It should be represented by every Telugu District; the governing body of the future University, the teachers in the Collegiate High Schools, the representatives of the needs of industry, commerce, agriculture, medicine and public health, the Government Department of Public Instruction and the

THE AIM OF PRIMARY EDUCATION.

local Legislative Council should be electorates from amongst which the required number of members of this Board should be elected. The Director of Public Instruction and the Minister of Education shall be *ex-officio* members and there should be an elected educationist, a salaried officer, as the President of this Board. The relations between this Board and the University on the one hand and the Government Public Instruction Department on the other should be statutorily determined.

There should hereafter be given unity to the educational system by abolishing the existing cleavage between the Government Education Department and the teaching staff of the privately-managed schools and colleges with facilities for an interchange of teachers among the various educational institutions, Government or non-Government. The teachers of the Secondary and Intermediate grade should be adequately paid and the meaningless distinction between Government servants and private institution servants of the educational establishments should be done away with. The Government might have some financial difficulties but they must be squared up by special negotiations between the various private managements and the Public Instruction Department. Unless this reform is effected, unless the teachers who are now underpaid and so practically scared away from the proverbially "sorriest of trades," are paid decent salaries, and assured of fixity of tenure and pensions, etc., according to the C. A. C., the Secondary and Intermediate Department of Education, the basic foundation of the whole higher structure of education can never prosper and any attempts to evade this responsibility and shelve a long over-due reform will lead to nothing short of the disaster of a big edifice built on a fragile foundation of sand.

(To be continued.)

EDUCATION is generally divided into three main divisions such as Primary, Secondary and Collegiate. With different names these three divisions are found in all the civilised countries of the world. Different nations have from time to time tried to fix a standard for all these three grades and have not arrived at any satisfactory conclusion. In 1870, an Elementary Education Act was passed in England which laid down that there should 'be provided for every school district, a sufficient amount of accommodation in public Elementary schools, available for all the children resident in such district.' An Elementary school was defined as 'the school or department of the school at which *elementary education* is the principal part of the education there given.' In 1876 an Act was passed which said that 'it shall be the duty of the parent of every child to cause such child to receive *efficient* elementary education in reading, writing and arithmetic.' A child was defined as 'between the ages of five and fourteen years'.

In the above two Acts we do not find any clear idea of what the elementary education, that should be given to children, should consist of, nor the aim or object of the Government in making elementary education compulsory. No civilised form of government has as yet any definite code which lays down the standard up to which it wishes every subject of the realm to study. No doubt we have compulsory education in almost all countries, but in no country have we as yet any standard fixed. This is an empirical stage where every educationist thinks that his propaganda is better than all

the previous ones put together. We have not been able to know what is Primary or what is Secondary. Is a knowledge of the Three R's primary education? If so, to what standard in each? Should primary education include subjects other than those that are taught in our present day-schools. Should we not accede to a boy's knowledge of the Three R's and other matters even if he has not attended any recognised school but has picked up everything in the school of experience? Where should we draw the line of demarcation between Primary and Secondary?

Some of the above questions cannot be answered off-hand. We have to find out the aim of Primary Education. What is the object of any Government in making Primary Education compulsory? What form of mind-training should it give to its young children so that they might become useful and prosperous citizens of the State? The aim of education ought not to be simply the imparting of facts that Henry VIII had six wives or that the Count of Abesberg had 32 children, but, that it should prepare the pupil's mind 'to receive facts, to interpret them aright, to distinguish facts from opinions, to reason correctly from them, to recognise that logic of words is not necessarily the logic of facts and to make practical use of the information thus gained, and thereby develop his character.'

The first requisite to a student is a knowledge of himself; and this he cannot get from any second-hand. He should try to find it out under a proper guidance. The knowledge that one gains from one's own experience and at first-hand is gained with little conscious effort to that acquired through second-hand. We carry greater

impressions of an object we see personally than of an object whose description we read of or hear. It is the mental development that is aimed at in primary education and instead of taking it "on the lines of least resistance, it is preferable to take it on the lines of greatest connection." It is this mental development that goes a great way in forming the man's character and no education can be said to be perfect which leaves this important problem aside. As Locke said, 'God did not make man a mere biped and leave it to Aristotle to make him rational' and so it is not the possession of a few facts or the remembrance of a jingle of Therapeutics that constitute education, but the development of character which is the direct result of good mind-training. "Instruction is but the least part of education.....that which every gentleman desires for his son is contained in these four things—Virtue, Wisdom, Breeding, and Learning"; and so Locke places Learning in the last.

Thus, so far as Primary Education goes, it is absolutely necessary to impart to the boy such knowledge which will be practicable and useful to him in later life and which would make him a good, honest and upright citizen. The subjects should be such and should be so arranged as to demonstrate the application of the method of attaining an easy, smooth, and even development of the reasoning and imaginative faculties, for it is the combination of both of these faculties that goes to make a thorough education. In India, the oral methods employed in telling tales to juvenile hearers and putting questions and eliciting answers, have proved far more efficient than the means of imparting knowledge through books that, without being "literate, the Hindu is often much

better educated, than the western observer, accustomed to consider illiteracy as ignorance, can possibly imagine." It is the power of judgment that ought to characterise the study of books. Learning without proper understanding and erudition without judgment, constitute the futile attempts of modern education. Common sense, good sound common sense, ought to be the resultant of all learning.

How is this most desirable end to be obtained? Can the school alone be held responsible for the formation of the boy's character? How far can the school authorities undertake within the limited time allotted to them, to mould the character of the boy and to train his mind? Will not, the public or the Government be in the wrong if they expect finished products out of the school without calculating the influences that are at work on the boy at home and outside the school? The subject has been discussed at some length in my article on 'Literature as part of Education' in the "Educational Review" of Madras. The child gets its major part of education at home and the Primary Schools have to so regulate that home-education as to make it useful in increasing the sense of intellectual responsibility, and to fit the student for the position he has to take up in after-life. Many of the years spent at school in acquiring proficiency in dead languages is a comparative waste. In most cases the cramming of Poetry in languages which are dead, has done more harm than good. To many boys it is not only a repulsive occupation but gives them the idea that the whole thing is really rather rubbish.

The feeling that a utilitarian or practical education is in no way inferior to the acquiring of classics is of very modern growth.

The majority of the boys that leave the Elementary schools cannot express themselves with ease even in their own languages. They know very little of History, Geography, Science or Mathematics. They have lived in the Grammars which they forget as soon as they leave the school. The various branches of modern science taught in their mother-tongues will provide just as good and far more interesting and stimulating mental gymnastics than the laborious study of foreign tongues.

Certain broad suggestions with regard to the courses of study in Elementary schools may be made. The education should be wide and varied and stimulating to the mind and not specialised. What is needed is that all men and women should acquire an intelligent interest in the laws of nature by which the world is governed and in the principles on which life must consequently be conducted. The boys in the Primary Schools should be encouraged to a sense of responsibility and the necessity of personal trial and effort in understanding what is seen and done. It is this sort of training which will help to make more intelligent workers in all trades and professions.

A special knowledge of their country's history and geography, with a general knowledge of the world's geography, the Three R's, the laws of nature, that affect our ordinary daily lives and a religious faith in one's own religion would be far better than burdening a young boy with 500 lines from Milton or Goldsmith or Kalidasa, or compelling him to learn Pneumatics. Let stories from all religious books be told illustrating great moral principles. No period is better enjoyed by students than the one where stories are told to a large extent. Homely truths, embedded in religious folk-lore appeal more strongly than any other form of preaching.

Thus the aim of Primary education ought to be to make the pupils understand more intelligently the things around them and to incite them to lead their future lives with greater mental, moral and material prosperity.

B. LAKSHMINARAIN RAU,

THE HEADMASTERS' CONFERENCE AT TRICHUR

BY THE HEADMASTER, High School, Narakal.

A Conference of the Heads of the fully-developed High Schools in the Cochin State was held at Trichur on the 3rd and 4th August, 1922, under the presidency of F. S. Davies, Esq., the Director of Public Instruction. About 20 Headmasters and 4 Headmistresses attended, which gives an idea of the extensive spread of Secondary education in the little State. The vital questions of the day affecting the organisation and equipment, as well as the curricula, of the Secondary Schools were discussed.

To begin with, it was pointed out to the Conference that the average French boy in the French schools writes his mother-tongue with far more ease and facility than the English boy does English. What accounts for this? The clue is furnished by Sir. P. J. Hartog, the present Vice-Chancellor of the Dacca University, in his book 'The French Method of Teaching Composition.' It has to be noted that the French educational system is very much centralised, and the Government exercise a large measure of control both as regards curricula and methods. The English translations of two specimen exercises in French composition were circulated among the members. One of these was entitled 'The Ginger-bread Fair', and was the work of a boy in one of the Elementary Schools, and the other was an account of 'The Sailing of Fishermen from a small port in Brittany' produced by a pupil of a Secondary school. The distinctive feature of the French method is that the subject for the essay is well threshed out in the class under the teacher's watchful guidance, and each pupil lays out a clear and

definite plan. It is this beautiful plan running through every essay that is the characteristic mark of the French method, and, besides, the subject is in the hands of a specialist. How different this is from the specimens that one comes across in some of the schools in Southern India, where, perhaps, the mistakes in Idiom, Grammar, and Spelling are pointed out, *whilst the plan and the paragraphing are entirely lost sight of!* Another factor that accounts for the superiority of the average French pupil is that every teacher teaching a special subject in the school considers himself or herself to be a teacher of French also, and, besides insisting on the accuracy and appropriateness of the language, devotes some hours a week to language teaching.

The President himself read a paper on the 'Teaching of English in England', which was largely based on the recent report on the teaching of the subject issued by the Board of Education. This report, it may not be generally known, is a very admirable one, and reflects the opinions of a large number of representative English witnesses who gave evidence before the Committee that have drawn it up. In the Elementary Schools of England, 9 to 10 hours a week are set apart for English, "the importance of which in these schools is absolute and unchallengeable." "It should be the part of every teacher to secure in his own subject accurate and appropriate expression of the child's ideas. Every teacher is a teacher of *English*." Speech training, oral expression, and the writing of English are largely insisted on. Summarising, critical examination of passages, listening to choice extracts read sympathetically, simple descriptions of common objects, free and friendly criticisms by the scholars of each other's work, etc., are regarded as positive methods or aids in the teaching of English. In the matter of reading aloud, the teacher must read well

himself, and he should show that he feels what is read. Reading aloud should follow, not precede, the comprehension by the pupil of the passage read. A detailed study of individual passages of fine prose and verse in a book of literary extracts is a useful exercise. The teacher must discover for the children the delight of reading, and he should persuade them rather than coerce them. In regard to poetry, there must be systematic revision of pieces learnt, and the pupils must be encouraged to make their own anthologies.

The next subject taken up for consideration was 'the use of the modern grammatical terminology in the teaching of English.' The progressive tendency of the present day aims at systematising and simplifying English Grammar, and making it more direct and plain and Professor West's Revised Grammar has been based on the recommendations of the Committee appointed to report on the question of the new grammatical terminology. One or two illustrations of a simple character will make what is meant clearer. In the sentence 'The boy is lazy,' the verb which is designated in the old grammar books as the 'copula' is now designated 'a verb of incomplete predication,' the term 'copula' belonging to Logic rather than to Grammar. To quote another example, in the sentence 'he seems mad,' the word 'mad' is known as the predicative adjective. We have, therefore, to ring out such old terms as the 'copula' and the 'compound sentence,' and to ring in such new terms as the 'predicative adjective' and 'double and multiple sentences.' Masters who have been wedded to the old scheme of things may find it difficult to adopt the new grammatical terminology, yet they have to be abreast of the times.

The means of combating the deterioration of the handwriting of pupils and those for the encouragement of extra reading among them

were then considered, and several valuable hints and suggestions were given by the members.

An important feature now noticed in the organisation of some of the best schools in England is the gradation of pupils, not according to forms, but according to their attainments in subjects. For example, a pupil of the Fifth Form may be particularly good, say in English, and weak, say in Mathematics. It will certainly be advantageous if he attends the English class with the Sixth Form pupils, and the Mathematics class with those of the Fourth Form. It was considered how far it would be feasible to arrange a time-table suited to the requirements of such pupils. Though this question and the question of co-operation between schools in the same town viewed from the standpoint of economy presented certain practical difficulties, nevertheless they provoked a good deal of thought. Perhaps the day is not very far off when a satisfactory solution will be arrived at.

As regards the Headmaster's actual teaching work in a school, opinions seem to vary. While, in several of the best schools in England, the Headmaster's work is mostly of an administrative nature, here, in Southern India, he, perhaps, teaches *a little too much*. It was, therefore, decided that the happy mean should be struck by the Headmaster's teaching 15 periods a week and employing the rest of his time for the supervision and co-ordination of studies, on which depends to a very large extent the efficiency of the school, as his watchful care will be a stimulus to the pupils and masters, and, besides, will considerably raise the tone of the school.

The Conference was on the whole very edifying and instructive, and there is no doubt that every one present thoroughly enjoyed it, and went away much better informed. The thanks of the members, one and all of them, are, therefore, due to the worthy Director, who, besides giving them an opportunity of assembling together and learning at the hands of one another, animated them with fresh life and vigour by his interesting and inspiring talks replete with up-to-date information.

IMPRESSIONS OF OXFORD.

MR. STEPHEN LEACOCK who combines his role of Professor of Economics in McGill University with that of a humorist of world-wide fame, has recently had some very witty and sarcastic things to say about Oxford University, which he visited while in England last year. Writing in the 'Morning Post,' he says:

One searches in vain in the Oxford curriculum for any adequate recognition of the higher and more cultured students. Strange though it seems to us on this side of the Atlantic there are no courses at Oxford in House-keeping, in Salesmanship, or in Advertising, or on Comparative Religion, or on the influence of the Press. There are no lectures whatever on Human Behaviour, or Altruism, or Egotism, or on the Play of Wild Animals. Apparently the Oxford student does not learn these things.

This cuts him off from a great deal of the larger culture of our side of the Atlantic. "What are you studying this year?" I once asked a fourth-year student at one of our great colleges. "I am electing Salesmanship and Religion," he answered. Here was a young man whose training was destined to turn him into a moral businessman; either that or nothing. At Oxford, Salesmanship is not taught and Religion takes the form of the New Testament. The more one looks at these things, the more amazing it becomes that Oxford can produce any results at all.

The effect of the comparison is heightened by the peculiar position occupied at Oxford by the Professor's lectures. In the colleges of Canada and the United States the lectures are supposed to be a really necessary and useful part of a student's training. Again and again I have heard the graduates of my own college assert that they had got as much, or nearly as much, out of the lectures at college as out of athletics, or the Greek Letter Society, or the Banjo and

Mandolin Club. In short with us the lectures form a real part of the college life.

"PUNK" LECTURES.

At Oxford it is not so. The lectures, I understand, are given, and may even be taken. But they are quite worthless, and are not supposed to have anything much to do with the development of the student's mind. "The lectures here," said a Canadian student to me, "are punk." I appealed to another student to know if this was so. "I don't know whether I'd call them exactly punk," he answered, "but they're certainly rotten." Other judgments were that the lectures were of no importance; that nobody takes them, that they don't matter; that you can take them if you like; that they do you no harm.

It appears further that the Professors are not keen on their lectures. If the lectures are called for they give them; if not, the Professor's feelings are not hurt. He merely waits and rests his brain until in some later year the students call for his lectures. There are men at Oxford who have rested their brains in this way for over thirty years; the accumulated brain power thus dammed up is said to be colossal.

I understand that the key to this mystery is found in the operations of the person called the tutor. It is from him, or rather with him, that the students learn all that they know; one and all are agreed on that. Yet it is a little odd to know just how he does it. "We go to his rooms," said one student, "and he just lights a pipe and talks to us." "We sit round with him," said another "and he simply smokes and talks and goes over our exercises with us." From this and the other evidence I gather that what an Oxford tutor does is to get a little group of students together and smoke at them. Men who have been systematically smoked at for four years turn into ripe scholars. If any one doubts this he can go to Oxford, and he can see the thing actually in

operation. A well-smoked man speaks and writes English with a grace that can be acquired in no other way.

VENERABLE PROFESSORS.

In what was said above I seem to have been directing criticism against the Oxford Professors as such; but I have no intention of doing so. For the Oxford Professor and his whole manner of being I have nothing but a profound respect. Here is, indeed, the greatest difference between the modern up-to-date American idea of a Professor and the English type.

Even with us in older days, in the by-gone time when such people as Henry Wadsworth, Longfellow, and William Cullen Bryant were Professors, we had the English idea: a Professor was supposed to be a venerable kind of person, with snow-white whiskers reaching to his stomach. He was expected to move around the campus oblivious of the world around him. If you nodded to him he failed to see you. Of money he knew nothing, of business, far less. He was, as his trustees were proud to say of him, "a child." On the other hand, he contained within him a reservoir of learning of such depth as to be practically bottomless. None of his learning was supposed to be of any material or commercial benefit to anybody. Its use was in saving the soul and enlarging the mind. At the head of such a group of Professors was one whose beard was even whiter and longer, whose absence of mind was still greater, and whose knowledge of money, business and practical affairs was below zero. Him they made the President.

All this is changed in America. A University Professor is now a busy-hustling person, approximating as closely as he can do it to a business-man. It is on the business man that he models himself. He has a little place that he calls his "office" with a typewriter machine and a stenographer. Here he sits and dictates letters, beginning after the best business models: "In re. yours of the eighth ult., would say," etc., etc. He

writes these letters to students, to his fellow-professors, to the President, indeed, to any people who will let him write to them. The number of letters that he writes each month is duly counted and said to his credit. If he writes enough he will get a reputation as an "executive," and big things may happen to him. He may even be asked to step out of the College and take a post on an "executive" in a soap company or an advertising firm.

DRIVING SHEEP OVER HURDLES.

The man, in short, is a "hustler," an "advertiser," whose highest aim is to be a "live-wire." If he is not, he will presently be dismissed, or, to use the business term, "let go" by a board of trustees who are themselves hustlers and live-wires. As to the Professor's soul, he no longer needs to think of it, as it has been handed over along with all the others to a Board of Censors.

The American Professor deals with his students according to his lights. It is his business to chase them along over a prescribed ground at a prescribed pace like a fold of sheep. They all go humping together over the hurdles with the Professor chasing them with a series of "tests" and "recitations", "marks" and "attendances," the whole apparatus copied obviously from the time clock of the business man's factory. This process is what is called "showing results." The pace set is necessarily that of the slowest, and results in what I have heard Mr. Edward Beatty describe as the "convoy system of education."

In my opinion, reached after fifty-two years of profound reflection, this system contains in itself the seeds of destruction. It puts a premium on dullness and a penalty on genius. It circumscribes that latitude of mind which is the real spirit of learning. If we persist in it we shall presently find that true learning will fly away from our Universities and will take rest wherever some individual and inquiring mind can mark out a path for itself.

Now the principal reason why I am led to admire Oxford is that the place is little touched by this measuring of "results" and this passion for visible and provable "efficiency." The whole system at Oxford is such as to put a premium on genius and to let mediocrity and dullness go their own way. On the dull student Oxford, after a proper lapse of time, confers a degree which means nothing more than that he lived and breathed at Oxford and kept out of jail. This for many students is as much as society can expect.

GREAT OPPORTUNITIES.

But for the gifted students Oxford offers great opportunities. There is no question of his hanging back till the last sheep has jumped over the fence. He need wait for no one. He may move forward as fast as he likes, following the bent of his genius. If he has any ability in him beyond that of the common head his tutor interested in his studies, will smoke at him till he kindles him into a flame. For the tutor's soul is not harassed by herding dull students with dismissal hanging by a thread over his head in the class-room.

The American Professor has no time to be interested in a clever student. He has time to be interested in his "department," his letter-writing, his executive work, and his organising ability, and his hope of promotion to a soap factory. But with that his mind is exhausted. The student of genius merely means to him a student who gives no trouble, who passes all his tests and is present at all his "recitations". Such a student if he can be trained also to be a hustler and an advertiser will undoubtedly "make good". But beyond that the Professor does not think of him. The everlasting principle of equality has inserted itself into a place where it has no right to be and where inequality is the breath of life.

PROFESSORS WORTH HAVING.

American and Canadian college trustees would be horrified at the notion of Professors who apparently do not work, give few or no lectures and

draw their pay merely for existing; but these are really the only kind of Professors worth having; I mean men who can be trusted with a vague general mission in life, with a salary guaranteed at least till their death, and a sphere of duties intrusted solely to their own conscience and the prompting of their own desires. Such men are rare, but a single one of them when found, is worth ten 'executives' and a dozen 'organisers.'

The excellence of Oxford, then, as I see it, lies in the peculiar vagueness of the organisation of its work. It starts from the assumption that the Professor is a really learned man whose sole interest lies in his own sphere, and that a student, or at least, the only student with whom the University cares to reckon seriously, is a young man who desires to know. This is an ancient mediæval attitude long since buried in more up-to-date places under successive strata of compulsory education, State teaching, the democratisation of knowledge and the substitution of the shadow for the substance and the casket for the gem. No doubt in newer places the thing has got to be so. Higher education in America flourishes chiefly as a qualification for entrance into a money-making profession and not as a thing in itself. But in Oxford one can still see the surviving outlines of a nobler type of structure and a higher inspiration.

KARUNATARANGINI

(English translations from the author's original lyrics in Sanskrit)

By K. KRISHNAMACHARYA, B.A., L.T.

WITH A FOREWORD

By PROF. P. SESHADRI, M.A.

Price 4 as.

'The poems are full of melody and fine sentiment.'—*O. H. O. Magazine*.

'The translations are readable.'—*The Daily Express*.

SRINIVASA VARADACHARI & Co., MADRAS.

A NOTE OF ADVICE TO INDIAN STUDENTS OF ENGINEERING

BY

MAJOR T. SALKIELD, M. INST. C.E., F.R.S.I.,
formerly Municipal Engineer of Delhi.

The very rapid evolution of Indian Self-Government, both Imperial and Local, is, as a natural and proper corollary, placing upon all classes of the community in that country, a burden of responsibility in an ascending scale, according to the intellectual and social status of each inhabitant.

Caste prerogatives and privileges must fall before the advancing tide of Western education, for it is now within the reach of the intellectuals of all classes to claim the right, so long denied by caste, to play an important part in the development of their motherland.

Up to the present time the important appointments have been held by Europeans and Indians, not in a competitive sense, but as equals in the burden of duty for the advancement of India. The time has, however, now arrived, as is evident to all who are acquainted with facts, that the elimination of the Britisher from the public services must continue at an accelerating rate, and that more appointments will be filled in future by Indians who, in consequence of education and training, are able to undertake these onerous and responsible duties.

Notwithstanding the strenuous efforts that have been made to persuade Indians to return to the simple life of the reputed "Golden Age" of their country, it is certain that this is impossible of accomplishment, however desirable such an ideal may be, and that the only alternative, in this age of scientific triumphs, is to see that India does not lag behind her sister nations, and that her sons and daughters shall, by utilizing the accumulated wisdom of both East and West, abolish everything that retards the progress of their country.

All modern inventions tend to eliminate the distance factor and East and West are being daily brought into closer contact for the ultimate benefit of each. At present it is the East which is seeking scientific knowledge from the West. In the future the flow may be reversed, but that time is not yet,

Of all the subjects which must receive the serious consideration of those who desire the betterment of their countrymen in India, none can take precedence of those which aim at improving the health and well-being of the individual; not in the curative direction, the domain of the doctor—the medicine man—but in the prevention of disease, the domain of the Sanitary Engineer—the hygiene man. It is in this branch of Science that the West has much to offer the East.

The decentralization of authority means the rapid development of Municipal institutions in which the will of the people, by their appointed representatives, shall be ascertained and carried out. For the execution of the necessary works and to make known the amenities of modern science, in such matters as Roads, Buildings, Drainage, Water Supply, Lighting and Transportation, it is necessary that India's sons should learn all that the West can teach, and to gain this knowledge many are now being educated in the Universities, colleges and schools of Great Britain.

Unfortunately, it appears that much ignorance prevails as to how the necessary training (not merely for the passing of qualifying examinations) can be acquired. It is not yet generally known that eleven Committees, styled "Indian Advisory Committees," have been established for the information and guidance of students. The Committees are:—

Committee	Secretary's Name
Allahabad	R.K. Sorabji, Esq.
Madras	A. Davies, Esq.
Calcutta	J.C. Coyajee, Professor.
Dacca	B.N. Das, Professor.
Bombay	F.M. Dastur, Professor.
Nagpur	S.R. Pandit, Esq.
Lahore	Kanwar Dalip Singh.
Bankipore	W.V. Duke, Esq.
Gauhati	J. Barooah, Esq.
Ajmere	J.A. Leslie-Jones, Esq.
Delhi	S.K. Rudra, Esq.

Every student who intends to proceed to Great Britain to qualify for any of the professions, should seek, first of all, the advice of the Committee having jurisdiction in the part of the country in which he resides.

WHAT ANIMALS OWE TO PLANTS.

THE two kingdoms of the living world are so related that the one cannot exist without the other. A world of animals and no plants is an impossibility. The deeper we investigate the problem of life, the stronger is this conviction brought home to us. When it is affirmed, not as a rhetorical exaggeration, but as an ascertained and established scientific truth, that we owe to plants the food that we take and the air that we breathe, we can realise in some measure the nature of this dependence.

The substance that makes up our body is a most complex chemical compound and is so delicate and unstable that it never for a moment remains the same. It is always undergoing change of some kind or other—becoming simpler or more complex and accordingly giving out or using up other substances. This ever-active, jelly-like substance is found in all living bodies, plants and animals alike, and is called protoplasm. In order that we may live and grow, we must have a plentiful supply of this substance. It cannot be manufactured in any scientific laboratory whatsoever; it can be only made in the living body which contains it already. From what other substances is the protoplasm able to manufacture its own substance and thus build up, maintain and develop our living mechanism? Whatever they are, we call them our food.

Thus far plants and animals go together. They are made up of the same substance; for the up-keep and growth of their bodies they require food. The difference lies in the nature of their food-materials. In a banquet of living organisms, plants and animals cannot partake of the same dishes. They sit apart. The plant is the cook. It prepares everything for the animal and gives out

of its bounty. The plant takes for its food lifeless things; the animal takes things that were once living. That is the difference between them.

The plant which is rooted to the soil sucks up whatever suitable solutions it can find there and these are sent up through the stem to the leaves. The leaves which are green and exposed to the sun have in them many small pores through which they breathe. They take in carbonic acid gas found in the air; this gas is made to combine with the watery solutions that are brought up and during this combination oxygen is evolved and it is breathed out. The products of this combination are sugars and starch and later on they are made up into more and more complex bodies, ultimately becoming part and parcel of the substance of the plant itself. The manufactured products are then sent out to various parts of the plant. Thus the plant lives and grows.

The plant seems to be warned of the evil of being sufficient unto the day. It produces, utilises and reserves its food. It provides for its future. A part of the food is deposited in some safe part of the body so that either it may live through hard times at least on diminished rations or, if it cannot survive whole, it may live in some small part of itself and be reborn when better times return. The perfection of this principle of reproduction and rejuvenation is found in the production of seeds. It must have suffered for long ages before gathering this wisdom and putting it into practical effect.

Animals take trouble not so much in making their food as in finding it. They go to plants that have manufactured complex products and reserved them; and the less scrupulous among them instead of going to the plants directly, devour other animals. If we trace the origin of the food of animals, we

would arrive at some plant product or other. Animals cannot take in carbonic acid gas (which acts as poison to them) or any of the mineral salts, and prepare their food. They are entirely dependent on plants in this respect. Every morsel of food that they take is a testimony to their dependence.

Food should be considered of value, not merely for the addition in weight or swelling in girth of the body, but for all the work that the body is thereby enabled to do. The energy for doing work is derived from the food alone. We have seen with what great difficulty plants make their food-products. How do they get the strength which their laborious processes necessarily require? It is obtained from the same food that they make; as soon as it has become part of their body, it begins to decompose and become simpler. During this process they give out like animals carbon dioxide. During this process, called respiration, energy which was stored up formerly is liberated and the plant goes on with its work. During favourable times they store up food and energy in considerable quantities and use them up in times of need. And so when animals take in this food, they are profiting by the past labour of plants. They have merely to decompose the food by oxygen in order to get energy. The greater the work that they do, the more is the food that they consume. Thus the plant world lies at the bottom of all animal activity. The life and activity of animals cease altogether, the moment plants are withdrawn from the field.

Not the work and display of energy of animals alone but most of the forms of energy that the modern man now commands, would cease. We see the power of the steam-engines and are astonished that water should have such power. What could the water alone do without the burning fuel? It is the

burning of the fuel whether it is wood or coal (which is only ancient wood compacted and compressed within the earth) that is the root of all steam-power. Now what is the burning of the wood or coal but a kind of respiration—a process in which what was once a living body is decomposed by oxygen of the air evolving carbon dioxide in the result? We see here again the evolution or liberation of energy during the burning of plant substance.

As we saw above, all animals require oxygen for their respiration. The quantity of oxygen in the air is limited and so if all living things breathed it in and gave out a foul gas, there would surely come a time when all would be choked to death. But when we look at the plants we see that they are taking up this foul gas all through the day and giving out oxygen, thus continually making the atmosphere around us pure and fresh.

Thus we see how the wheel of life is turning. Plants taking up a gas which is injurious to animals and making food out of it and other simple substances, leaving out another gas which is vital to the existence of animals, and by the process storing up energy; animals taking up stored-up food in plants and making it simpler during which process, energy is loosened and they are enabled to carry on their activities. Animals live, move and have their being owing to the fact that the world also contains plants. Verily, the life of animals is bound up with the life of plants and "so is the whole world bound in gold chains around the feet of God."

V. S. RAMASWAMY IYER.

JULY 1922.] 2ND S. ARCOT TEACHERS' CONFERENCE—RESOLUTIONS. 467

RESOLUTIONS PASSED AT THE SECOND SOUTH ARCOT DISTRICT TEACHERS' CONFERENCE HELD AT VIILUPURAM ON 29-7-22.

1. That, for the sake of securing eligibility, supplementary students in the S.S.L.C. class be permitted to appear only for the subjects in which they have failed.

2. That a pupil who has failed to secure eligibility for want of a few marks in C. History be declared eligible in case he gets double the deficient number of marks in any classical or vernacular language.

3. That each school do start a Co-operative Society for the benefit of its masters and pupils.

4. That this Conference calls upon the members of the South Arcot District Teachers' Guild to take shares in the proposed S.I.T.U. Publishing Company when it comes to be started and otherwise help its promotion.

5. That the percentage of marks for eligibility in English in the S.S.L.C. Public Examination be 35.

6. This Conference is greatly disappointed at the delay of the Government in passing final orders on the Provident Fund scheme for teachers and urges it to take immediate action in the matter.

7. That this Conference recommends a long-flowing shirt, Kudutha or Jubba, and a dhoti be the minimum dress of a teacher and the coat and turban be not insisted on and that the same be inserted in the Madras Educational Rules.

8. That this Conference is of opinion that early specialisation at the stage of the mental development of a boy of 15 is wrong in principle and recommends that pupils in Secondary schools should go through the same general education course.

9. That the S. S. L. C. Public Examination be held in the month of December.

10. That an Intermediate trained teacher be considered qualified to be the Headmaster of a Middle School.

11. This Conference calls upon the heads of educational institutions to see that the Boy Scout Movement progresses on sound lines and urges that the expenditure incurred by schools on this account be treated as legitimate expenditure for purposes of school grants.

12. This Conference recommends to Headmasters of Secondary Schools in the district to immediately organize Teachers' Councils in the schools under them on the lines suggested at the 14th Provincial Educational Conference held at Kumbakonam.

13. This Conference expresses its disappointment at the scale of pay suggested at the Conference of Managers in this district which is lower than that fixed by the Government and in the Conferences of Local bodies held in the years 1919 and 1920 and requests that in the interests of efficient education, the question be considered from a more liberal standpoint. In this connection it recommends for adoption the minimum scale of pay agreed upon by the S. I. T. U. in the last two Conferences.

14. That even first year supplementary pupils be allowed to appear for the S. S. L. C. Public Examination as private candidates.

15. That while approving the Draft Scheme of the popular Minister in the Department of Education of establishing Secondary Education Boards in every district, this Conference is of opinion (1) that the number of teacher-representatives should be at least fifty per cent. of the number of schools in the district; (2) that the Scout Commissioner, the Medical Officer and the Sports Secretary of the district be also included in the list of members.

16. That children of school-masters be given free education in the schools in which they are employed.

Free Five Days' Perusal!!!

THE IMAGE OF TRUE SWARAJYA.

THE LABOUR PROBLEM AND ITS COMPLETE SOLUTION

By a Complete Co-operation and Co-ordination between Capital and Labour

By P. H. L. VARMA, M.B.A.S., etc.

Is the book of the day. Have you read it?

(Over 200 pages of clear and compact Demy 8 vo. print.)

Price—Rs. 3.

Communist principles applied to Individualism and combining a special study in Oriental Socialism is the special feature of the book.

Write to-day for Free Five Days' Offer to the Publishers:—

THE GOKUL PUBLISHING HOUSE,
Budaun (U. P.), INDIA.

To be also had from

Messrs. POREVALLA, SON & CO.,
Book-sellers, FORT, BOMBAY.

Reviews and Notices.

A NOTE ON THE EDUCATION OF THE PARSEES CHILDREN WITH SUGGESTIONS FOR ITS REFORM—BY CAWANJI D. MAHALUXMIWALA. 1921. Pp. 248.

This is a note prepared by the author as a Supplement to the Report of the Committee of the Parsee Panchayet Trustees on the state of education among the Parsees which was published in 1920. This Note is published on the author's own account; and several additions have been made to it regarding the recent advance in educational theory and practice in the West, so that the Parsees can see for themselves how antiquated their present system of education is. The author points out how the Committee have not done sufficient justice to the question of moral and religious education, the revision of the course and curricula for both boys and girls and the question of girls' education. He rightly holds that education is a preparation for complete living both individually and socially by a training of the child's intellectual, spiritual and physical powers. Among the Parsees, their need is not so much the spread of elementary education among the masses as the improvement of the quality of education from infancy up to the adolescent stage, so that the child can pass out of school an efficient adult well-fitted for its position in work and life.

The writer urges the establishment of new model schools for the benefit of all Parsee children, rich and poor alike. The Parsee Panchayet Trustees should lose no time in starting a big educational fund especially since the spring of Parsee charity shows no sign of diminution in force or volume.

The writer makes a number of suggestions in his Annex to the Note about physical education in its wider sense, the importance of suitable furniture, equipment and grounds, the medical examination of school-children, external examinations not being advisable for pupils under 16, the necessity of keeping both the cultural and vocational aims in view and of encouraging the children's active and creative impulses, etc. He urges that steps should be taken to make the educational system adaptable to the varying aptitudes, capacities and requirements of the children. We have in the succeeding pages a good resume of all the ideas and thoughts of the best thinkers and writers on educational topics. We are told how to avoid coercion and too much of didactic disquisition, and make use of the personality of the teacher and the corporate life

of the school as factors in moral education. Girls' education receives elaborate treatment; and stress is laid on the fact that in the education of girls the provision for training for their natural vocation is the most urgent duty. Industrial and technical education receives adequate treatment. On the whole we wish we had greater space to devote to the review of this very instructive report.

THE HINDU RELIGIOUS YEAR, BY M. M. UNDERHILL: THE RELIGIOUS LIFE OF INDIA SERIES. (ASSOCIATION PRESS, CALCUTTA). 1921. Pp. 194.

This book is the result of an attempt by the author to describe the festivals common to the whole of Hindu India with some attempt to trace customs back to their anthropological and other sources. The first chapter is a short account of the Hindu method of reckoning time, the *Pralaya*, the *Yuga* eras, the Luni-Solar year, intercalary and deleted months, the *pakshas*, lunar days or *Tithi*, solar-days or *Divasa* and the legendary origin of eclipses. In the next chapter we have a treatment of the auspicious and inauspicious seasons, and of the explanations why *Dakshinayanam*, the *Krishna-paksha* the intercalary month, the week days of Mars and Saturn, the rainy season and *Kapila Shashti* are generally considered inauspicious. Then follows a description of the chief Sun-festivals. We hear of the generally prevalent Sun-worship of the Vedic times, the six sects of Sun-worshippers mentioned by Sankaracharya, the importance of the *Makara Sankranti*, the *Ratha-Saptami*, the *Mahavishua Sankranti*, *Svashtika Vrita* (*Svastika* being connected with the sun in the minds of Maharashtra women). The most prominent of the seasonal festivals, like the *Holi*, *Madana Trayodasi*, *Narali-Purnima* (from which date the S. W. Monsoon is supposed to abate), *Ganesa Chaturthi* (connecting probably Ganesa with the harvest of the early crops) *Gauri Festival* (most popular in Maharashtra), and the *Dasara* (lasting for the first 10 days of the light-half of Aświn) which unifies into one festival the various sectional feasts of *Sarasvati Puja*, *Lalita Panchami*, *Vijaya Dasami* and *Durga Puja*. The *Dasara* was most probably a seasonal festival when the rainy season is practically over, the early crops are ripe for harvesting and in ancient days kings were starting their winter campaigns. The other chief seasonal festivals are the *Kojagari* full-moon, *Lakshmi Puja* and *Dipavali*, *Naraka Chaturthasi* and *Yugadis*.

The chief lunar and planetary festivals are (1) the *Anavasya*, (2) the *Parvan* days (8th, 10th,

6th days of each *paksha*), (3) *Somavati* (a new-moon falling on a Monday), the *Rishi Panchami* (5th Sakla of Bhādrapada) when the stars other than the planets are worshipped. The worship of Vishnu Avatars, the *Ekadasi* days (the Vishnu Porana giving both the 8th and the 12th tithi as being sacred to Vishnu), the *Pradosha* (the light-half 13th, late evening, sacred to Siva who is worshipped at sunset), the *Sivaratri* of Magha (dark-half 13th) when fairs are held at the 12 great Linga temples of India (*viz.*, Ramesvara, Ujjain, Kedarnath, Benares, Omkaranath, Vaidyanath, Bhimasaunkara, Somnath, Nasik, Mallikarjuna, Naganath and Drishmesvara), *Kartikeya* worship which was extensive in the past, *Tripuri-Purnima*, *Vaikunta-Chaturthasi*, *Harihara-Yatra*, *Dattatreya Purnima* and such as are in honour of both the gods.

Animistic festivals, traceable in most cases to very ancient pre-Aryan sources, are treated under 4 heads:—Goddess and tutelary deity worship, like the worship of *Sita*, *Varuni*, *Shashti Devi*, *Kali*, *Jajattarini*, etc. Animal worship, like *Naga Panchami*, *Ananta Chaturthasi*. Spirit worship and worship of plants and inanimate things. The last chapter gives us a special account of the principal festivals in Maharashtra with which region the author is particularly intimate. The author wishes the book to be supplemented by lists of purely local feasts drawn up for each province and region. The book is very instructive, especially to the lay and foreign readers who are not acquainted with the ancient ritualistic tradition of the country.

PHYSIOLOGY AND HYGIENE READER. (MACMILLAN & Co., MADRAS). Price, 3 annas.

We hasten to acknowledge receipt of this useful scientific hand-book. The method of instruction adopted therein is indeed one of appreciable nature in that, ideas and principles bearing upon scientific knowledge are easily forced upon young minds in a homely conversational style. A few of the essential requisites for imparting elementary instruction in scientific subjects are (1) the mode of presentment of the subject, (2) the design and the cast of the illustrations chosen, (3) the selection of easy popular expressions for describing scientific terms and ideas, and (4) the choice and manner of the style through which the instruction is sought to be imparted. In this little book the 1st and the 4th out of the aforesaid conditions are satisfied. In regard to item (2) relating to illustrations, some of the wood-cuts herein presented are crude and careless of execu-

tion needing slight alterations and touching up; and what is required to be attended to in item (3) is the avoidance of many terse scientific expressions which will certainly puzzle the young mind. In this last suggestion it may perhaps be argued on behalf of the book that there are not suitable easier expressions formed ready to substitute the difficult terms used; and this is a true and recognised fact no doubt; but so long as easier and popular forms are yet to be coined, there is no justification for the use of blinding expressions calculated to puzzle the formative young mind. Under the circumstances, the adoption of even round-about description of the terms will be admissible. The publication is all the same a distinct addition to popular scientific educational literature and the author deserves all the credit due to him for the fairly successful manner in which the subject has been presented. It is hoped that the suggestions indicated above will be looked to in the succeeding editions of the book.

AN INTRODUCTION TO MATHEMATICAL ANALYSIS, BY F. L. GRIFFIN, PH.D. (G. HARRAP & Co., LONDON.) INDIAN AGENTS: P. T. I. BOOK DEPOT, BANGALORE.

In this book, the author condemns 'the traditional plan of studying Trigonometry, College Algebra, Analytic Geometry and Calculus separately,' saying that under such a plan, 'a student can form no conception of the character and possibilities of Modern Mathematics nor of the relations of its several branches as parts of a unified whole until he has taken several successive courses; and the author presents in the book a unified course which avoids the abovementioned disadvantages and which enables a student to get, early enough in his career, an elementary working knowledge of mathematical analysis including Integral Calculus which is rapidly becoming indispensable for students of the Natural and Social sciences. We should think that the author has well succeeded in his attempt at presenting such a unified course. Further the author has laid emphasis upon certain fundamental notions such as rates, counting values, etc., and, unlike many authors of elementary text-books, has dealt with those notions in a very satisfactory manner so that the students get no wrong notions and have not to unlearn anything as they pass on to more advanced mathematics. We specially commend the author's emphatic way of saying that "division by zero is impossible," "the limit idea is essential to a satisfactory definition of (1) an instantaneous speed, (2) length of a curved line," etc.

The book treats of Differentiation and Integration and their geometrical and physical applications, of Trigonometry and Logarithms, of co-ordinate geometry of line, circle and the conic, of permutations, combinations and probability, and of complex numbers with their geometric representation. Thus the scope may appear to be rather ambitious but the subjects are so handled and in such a compact form that one understands the essentials of each subject with-

out the details and of the relation of subjects to one another. And the book gives many problems taken from real life in which the subjects dealt with find an application and thus the course is made very interesting and attractive to the students.

Such a course will be a useful introductory course to the B.A. (Pass) Mathematics and to the B.A. (Hon.) Physics and Chemistry students of the Madras University.

(Third Edition—In the Press—Will be ready shortly.)

A COURSE OF GENERAL MATHEMATICS FOR HIGH SCHOOLS

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

Crown 8vo. 400 pages with over 195 diagrams

By V. RAGHUNATHA AIYAR, B.A., L.T.

Assistant, Teachers' College, Saidapet.

Approved as a Text-book for Schools under Public management,

vide Fort St. George Gazette, Part I-B, p. 641, dated 21-6-21.

Approved as a Text-book suitable for school use,

vide Fort St. George Gazette, Part I-B, p. 877, dated 21-9-21.

INTERMEDIATE EXAMINATION, 1923.

SELECT ESSAYS

FROM

ADDISON'S SPECTATOR

CHIEFLY THOSE RELATING TO SIR ROGER DE COVERLEY

EDITED WITH INTRODUCTION AND NOTES

BY

E. H. ELLIOT, B.A.

late of the Presidency College, Madras.

Price Re. 1-12-0. Charges extra.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

The Educational Review.

The retirement of Sir Henry Sharp from the Secretaryship of the Government of India removes a very

able and experienced educationist from the service of the country. Sir Henry Sharp rose to the great distinction of becoming Secretary to Government in spite of the fact that he was not a member of the Indian Civil Service. During his long career in the Indian Educational Service he occupied many places and acquired valuable and diverse experience which does not fall to the lot of the average member of the service. As the first Educational Commissioner with the Government of India he inaugurated the Bureau of Education and was responsible for the publication of valuable educational literature relating to India. During the period of his Secretaryship, it was his privilege to be in charge of important educational legislation constituting new Universities. Sir Henry will carry with him the best wishes of all lovers of education in the country. With the retirement of Sir Henry Sharp and the reversion of Mr. Mayhew to the Directorship of the Central Provinces, the Imperial Government loses ability and experience of great value which do not seem to be compensated for adequately by the new holders of the offices.

India is a poor country, but its spirit of generosity has always been marked and it is this circumstance that encourages one to plead for support for the Fund which has just

been started by Sir Rabindranath Tagore at the request of Prof. Paul Vinogradoff, the well-known Jurist of Oxford for the relief of the starving intellectuals of Russia. Owing to the riotous tyranny of the Bolsheviks the intellectuals of Russia have suffered terribly, in view of their disinclination to support the disruptive tendencies of Bolshevik philosophy. A beginning has already been made in the direction of collecting funds, a few subscriptions having been secured from such exalted quarters as those of the Viceroy of India and some of the Provincial Governors. We hope the support will spread and Sir Rabindranath will be able to forward some money to the assistance of the cause he has espoused.

We are glad that economic necessity has driven the Madras Government to effect a piece of reform which has long been over-due.

We refer to the retrenchment in the Educational Department—the abolition of Assistant Inspectors, Sub-Assistant Inspectors and Supervisors of Primary Schools, the last two being replaced by a new class of officers known as Deputy Inspectors. The old system resulted in a good deal of waste of money and was also responsible for delay and clumsy and unbusiness-like ways of disposal of business. At the bottom of the scale there was the Supervisor of Primary Schools, who was never able to do justice to his work partly because of his want of sufficient education and partly because of the poor salary and poorer allowances

which placed temptations in his path, to an extent that made corrupt practices quite common. Then there was the Sub-Assistant Inspector of Schools who went over part of the ground again. There was the Assistant Inspector above him, but being more or less a senior Sub-Assistant Inspector put in charge of a district, he was not able to exercise much of a control over the Sub-Assistant Inspectors. At the top of them was the Inspector of Schools whose jurisdiction was too big to admit of any effective supervision or even of useful work. We are glad that all this will now disappear and each district will be in charge of an Inspector helped by a certain number of Deputy Inspectors. We are glad that this reform, besides making things more efficient, will also result in an annual saving of Rs. 50,000.

Favoured Press correspondents have been sending out grandiose messages on the educational activities which the Madras Minister of Education is said to be adumbrating on the cool heights of Ootacamund. The country has been told that educational legislation of a serious kind will soon be undertaken and the Madras University will enter on a new era of reconstruction. It would also appear that he has also invoked the formidable support of the Director of Public Instruction. But may we enquire why the public should not be taken into confidence? The only wisdom which the public has been able to glean in the

matter has been from the Associated Press. We are told that the legislation will be on the lines of the newly-constituted University of Allahabad—but why not invite suggestion, publish details of proposals and make it a matter of public concern instead of a subject of secret negotiation on the hills, to which a particular Press representative alone seems to be allowed access?

[Since writing this we find it has been done.—ED.]

Among the resolutions passed at the last session of the Educational Conference at Kumbakonam there is

one to which we would invite special attention, the proposal to establish a publishing concern under the auspices of the South India Teachers' Union. Apart from the benefits which will accrue to the South India Teachers' Union, financially, from such a step, it is a welcome one. It will give opportunities for the exercise of the spirit of enterprise on the part of teachers and all their valuable experience will be utilised for the advancement of educational literature. Foreign publishing firms have obtained a very strong foot-hold in the country and their influence only tends to grow. If somebody calculated the drain on the country's wealth which all this implies, it will probably be found to be enormous. Every effort must therefore be made to make India self-contained in the matter and this addition to the country's publishing strength must be considered highly useful. We wish the enterprise all success.

We are glad that sanity is beginning to dawn on the Government of Bengal in its attitude towards the University of Calcutta and the Legislative Council has just sanctioned a grant of Rs. 2½ lakhs to the University in the supplementary list. For sometime past the University has had to struggle against financial troubles of a most embarrassing kind and the deficit to the end of June reached the sum of more than five lakhs! The University was thus threatened with a grave situation and it looked as if the good work of decades of such devoted and distinguished patriots as Sir Asutosh Mukherjee would come to an end. But this grant should relieve the tension, though we are not sure if it will cure the trouble completely. The University of Calcutta headed by its intrepid chief, Sir Asutosh, has been putting up a strenuous fight with the Government insisting on the right of the University to manage its own internal affairs without outside interference and at the same time claiming the support of the State for its activities and all lovers of education and independence in the educational world will extend to it their hearty support.

An important piece of educational reform has just been passed by the Senate of the Calcutta University. Students will hereafter have their own vernacular as their medium of Instruction and examination up to the Matriculation standard. Curiously enough

Vernaculars as Media.

this has upset some of the Anglo-Indian papers in the country, the *Englishman*, the *Statesman* and the *Pioneer* joining in a shrill chorus of disapproval. The papers see political dangers in this step and it is made out that Sir Asutosh himself has succumbed to the advances of the Non-Co-operators! We have no hesitation in welcoming the reform, in spite of our pronounced conviction about the useful part which English has to play in the country, especially as the experiment has a better chance of success in Bengal than in almost any other part of the country. The people of Bengal are happily homogeneous with respect to language and there should be little difficulty in introducing Bengali as the medium of instruction and examination up to the Matriculation stage. It will be remembered, it was also the recommendation of the Calcutta University Commission. The problem is of course not so easy of solution in Southern India, especially in a city like Madras, where so many vernaculars are represented. Let not Anglo-Indian papers see the bogey of Non-Co-operation in this innocent piece of educational reform which has received public support in many directions. The following opinion on the subject by Mr. Hartog, the Vice-Chancellor of the Dacca University and a former member of the Calcutta University Commission given in response to the *Statesman's* enquiry will be found interesting:—

You ask for my opinion on the relative values of the English and vernacular languages for educa-

tional purposes in Bengal. I see no reason from my recent experience to vary the opinions which I expressed on this subject in 1919 as a member of the Calcutta University Commission. I am of opinion that English is at present used at too early a stage in the high schools as a medium of instruction and that the pupils are in many cases incapable of following the lessons given to them in such subjects as history and geography through the medium of English. I believe that time would actually be gained for the study of English if the instruction in subjects other than English itself and mathematics were given in most cases in the vernacular. The methods of teaching English in the high schools are often slow and old-fashioned. By the introduction of modern methods good results would be obtained far more rapidly.

I think I am right in saying that most of the pupils in the high schools of Bengal do not understand English as it is spoken by Englishmen. The introduction of modern phonetic methods in the first instance in Intermediate colleges, or the two years of the Intermediate University course, and in the training colleges, is a matter of urgency. By the introduction of such methods a revolution in the teaching of spoken English in the schools would be effected in a relatively short time. I attach the greatest importance to the teaching of the mother-tongue, which, well taught, should be the most powerful instrument for the training of the intelligence. I am not able to express a first-hand opinion on the subject, but I have been repeatedly told that the teaching of the mother-tongue in Bengal and other parts of India is at present weak, and entrusted as a rule to poorly-paid teachers.

30] while I think that the teaching of the mother-tongue in the various provinces of India greatly needs strengthening, I regard a knowledge of English as essential for all who are going on to higher studies. There are, I know, some who think that an Indian language should be the

lingua franca of India. But no Indian language can serve as the key to the knowledge of the West, as English does. More and more are Indian students feeling the need to learn French and German as well as English. It is exceedingly unlikely that the students of the Madras and Bombay Presidencies will be willing to learn Hindi or Urdu in addition to at least one Western language.

Granted, however, that a knowledge of English should be regarded as essential, ought it to be used as the medium of instruction in the Universities? I think the answer should be in the affirmative, at present, for most subjects. It is of the greatest advantage to Indian Universities that they should be able to draw a certain proportion of their teachers, not only from Europe and America, but also from other provinces of India. On the other hand, I should be sorry to think that any Indian University teacher should feel himself debarred from giving explanation or lectures in the vernacular when he is of opinion that the subject would be more easily mastered in that way by a particular class.

Prof. Stephen Leacock of America has been giving to the press Impressions of his impressions of Oxford. Oxford in his usual humorous manner. He draws attention to the fact that the lectures of professors are not of serious importance in the life of the student and that much of the education and the culture is acquired by intimacy of contact with the tutor. "It is from him, or rather with him," writes Prof. Leacock, "that the students learn all that they know; one and all are agreed on that." Yet it is a little odd to know just how he does it. "We go to his rooms," said one student, "and he just lights a pipe and talks to us."

"We sit round with him," said another "and he simply smokes and talks and goes over our exercises with us." "From this and the other evidence I gather that what an Oxford tutor does is to get a little group of students together and smoke at them. Men who have been systematically smoked at for four years turn into ripe scholars! If any one doubts it he can go to Oxford, and he can actually see the thing in operation. A well-smoked man speaks and writes English with a grace, that can be acquired in no other way." This intimate personal contact is unfortunately lacking in Indian Universities and even the new so-called 'residential' Universities have not advanced matters very much. There are many other suggestive remarks in the course of the article which we extract elsewhere in this number.

As we anticipated there have already been bad consequences Caste in Col- from the appointment of Selection Committees attached to Colleges. Promising students belonging to the Brahmin caste are being kept out and less qualified Non-Brahmin students are being admitted. This is not fair at all to anybody concerned with the business. The College loses the privilege of having the best students possible; intelligence and industry are at a discount; there is no incentive to the Non-Brahmin student to do better. It is a mistake to imagine that all this helps the Non-Brahmin student in the long run. Assured of admission even with a poor examination record he is apt

to take things more easily and not exert himself very much, while the persecuted Brahmin student thus handicapped works harder knowing that his chances of admission are poorer unless he does extraordinarily well. The enjoyment of favoured protection is undoubtedly not so conducive to progress as struggle in the open competition of life and the earlier the Non-Brahmin community learns the lesson the better for its future. The plight of the Eurasian community in India which has always enjoyed special protection at the hands of Government is a lesson, while the Mohamedan community also is another illustration of the uselessness of special favours. Let the young men of the Non-Brahmin community come into the open forum and fight with their brains for success and they will improve. It is interesting to note that all the three South Indians who passed in the Indian Civil Service at the last examination held at Allahabad are Brahmins—let the Non-Brahmin young men endeavour to produce such a record, without begging for special favours.

The Government of Bengal have taken a very important step Technical Education in Bengal. in the matter of Technical and Vocational Education. They propose introducing a scheme into the Dacca educational system with a view to its later extension to other parts of the Presidency, if it is successful. With this object in view they have appointed a Committee with the Vice-Chancellor of the Dacca Uni-

versity as President and nineteen other members to give the proposals a detailed consideration. The resolution making the announcement points out that efforts to create a taste for vocational education hitherto have failed owing to the Matriculation Examination dominating the educational system and any course which did not lead to a University career was looked upon with disfavour, but public opinion however has lately undergone a change and the necessity for reform is now realised. The proposals are intended to meet the requirements of Secondary Schools, the Intermediate and the Dacca University Colleges, and they include a scheme to establish a central workshop in Dacca which will be available for Secondary Schools and at which boys will be taught a craft likely to be useful to them in after-life. They even extend to definite vocational courses in the Intermediate courses and in the University. But may we enquire why all this partiality should be shown to Dacca? Obviously the experiment should have begun in Calcutta, especially as there are already some endowments for technological education at the University. But apparently it is the presence of such an independent Indian as Sir Asutosh Mukherjee at the head of affairs there that makes the Government think of diverting the patronage to Dacca! With its extensive industrial and commercial life, it would strike any unprejudiced person that Calcutta was the best place for making such a departure in educational work. But the ways of the Government still continue to be mysterious in spite of the

professions of constitutional reform and the supposed introduction of the popular element into Government.

An interesting situation has developed in connection with a Committee appointed by the Government of Bombay the other day to make recommendations

Technical and Industrial Education in Bombay.

on the subject of Technical and Industrial Education. The Committee was presided over by Sir M. Viswesvarayya, but the European majority and the Indian minority on the Committee could not agree and have produced two different reports! The main points of difference are under four heads: types of schools or institutions; number of pupils to be trained and estimates of costs; organisation and agencies for carrying out the scheme; and other points of a minor character. The majority wish to have apprentice schools attached to factories and wish to make provision for the training of a small number as a necessary consequence. The minority including the President contend that this will not give adequate facilities as the number of factories is very small and it will not be possible to start schools at more than a dozen places if this is the type of institution to be started. The majority put the estimated number of pupils to be trained at six hundred but the minority state that to them it is unthinkable that so small a provision for the industrial education of the lower grades will satisfy the needs of a population of twenty millions. It must be interesting to make a fuller study of the report.

We are immensely pleased to read in the *Madras Mail* the following note:—
Rao Sahib R. Krishna Rao Bhonsle, M.R.A.S.

"An Officer's Status Raised."—Rao Sahib R. Krishna Rao Bhonsle, Manager of the Office of the Commissioner for Government Examinations, is henceforth to be designated as Assistant Secretary. Government have sanctioned this change at the instance of Mr. R. Littlehailes, Director of Public Instruction, who is also Commissioner for Government Examinations. Mr. Krishna Rao Bhonsle is an officer of considerable experience and ability. In recent years as many as 33,300 candidates have been appearing annually for the various Government Examinations, and the accurate and expeditious manner in which the work that this entails is being got through reflects much credit on him, and as a recognition of this fact the status of his office has been raised."

We gladly endorse every word of this interesting note; the honest and intelligent work of Mr. Bhonsle certainly merits heartiest acknowledgment and recognition. The change of designation from the prosaic one of 'Manager' to the more dignified appellation of 'Assistant Secretary,' is consistent with the responsible and confidential work that he has been doing for over a quarter of a century. When one thinks of Government Examinations in this Presidency, one cannot but think simultaneously of Mr. Bhonsle. Not only those who are in a position to know Mr. Bhonsle's work at first hand but also those who know of it by published reports, will appreciate the well-deserved honour of being the first Assistant Secretary. We offer him our hearty congratulations.

A Manual of Arithmetic

By the late MR. S. RADHAKRISHNA AIYAR, B.A.,
Principal, Maharajah's College, Pudukotah.

Approved as a Text-book for all Classes and Forms.

Vide Fort St. George Gazette, 24th Jan. 1907.

Very useful for School-Leaving Certificate Examination

12th Edition (1921).—Price Rs. 2.

A Handbook of Manual Training or Educational Handwork in Paper and Card-Board Modelling

(in Tamil)

By S. YAGNASWAMI, Supervisor of Schools, Namakal

Book I. Price As. 8.

SRINIVASA VARADACHARI & CO., TRIPLICANE, MADRAS.

BOMBAY UNIVERSITY EXAMINATIONS.

SCHOOL FINAL 1923.

MATTHEW ARNOLD: SOHRAB AND RUSTUM, with B.S. A.
Introduction and Notes, by Mr. T.O. Hodges, B.A.,
Professor of English, Presidency College, Madras 1 0

B. A. 1923 and 1924.

SHAKESPEARE: MACBETH, with Introduction and
Notes, by the Rev. J. Morrison, M.A., D.D., formerly
Principal and Professor of English, General
Assembly's Institution, Calcutta (College Classics.) 1 6

—: MIDSUMMER NIGHT'S DREAM, with In-
troduction and Notes, by the Rev. R. Scott, M.A.,
Professor of English, Wilson College, Bombay
(College Classics) ... 1 6

—: JULIUS CAESAR, with Introduction and
Notes, by Mr. Mark Hunter, M.A., Prof. of English,
Presidency College, Madras (College Classics) ... 1 12

—: TWELFTH NIGHT, by Mr. Michael Macmillan,
M.A., D.Litt., I.E.S. (Retired) English Lecturer in the
University of Birmingham (Formerly Principal and
Professor of English, Elphinstone College, Bombay) 1 12

SHELLEY: ADONAI, with Introduction and Notes,
by Mr. W. E. Hoare, M.A., formerly Principal,
Doveton College, Madras... 0 10

MILTON: LYCIDAS, with Introduction and Notes,
by Mr. N. Vaidyanatha Iyer, M.A., formerly of the
Teachers' College, Saidapet ... 0 6

TENNYSON—GUINEVERE, with Introduction and
Notes by Mr. E. H. Elliot, B.A., formerly of the
Presidency College, Madras ... 1 4

—: TWO VOICES, with Introduction and
Notes, by Mr. E. H. Elliot, B.A., formerly of the
Presidency College, Madras. Just Ready ... 1 4

M.A. 1923 and 1924.

SHAKESPEARE: OTHELLO, with Introduction
and Notes, by Mr. Michael Macmillan, M.A., D.Litt.,
formerly Principal, Elphinstone College, Bombay
(College Classics) ... 1 6

CHAUCER: PROLOGUE, with Introduction and Notes,
by Mr. W. J. Goodrich, M.A., formerly Principal,
Pachaiyappa's College, Madras ... 1 2

—: THE KNIGHT'S TALE, with Introduction
and Notes, by the same Editor. ... 1 2

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

ENGLISH CLASSICS

Abridged and Adapted for use in Indian Schools.

 In each case the editorial work has been done very carefully, the text having been abridged by omission of passages of secondary interest. Further, wherever it has been found necessary, obsolete words and expressions have been replaced by their modern equivalents.

Gulliver's Travels, edited by Egerton Smith, M.A., I. E. S., Professor of English Literature, Dacca College. Price, Re. 1.

Robinson Crusoe, edited by Egerton Smith, M.A., I. E. S., Professor of English Literature, Dacca College. Price, Re. 1-4.

Vicar of Wakefield, edited by J. C. Rollo, M.A., Professor of English, University of Mysore. Second Edition. Price, Re. 1.

Lorna Doone, edited by F. R. Tomlinson, B.A., I.E.S., Professor of English Literature, Government College, Lahore. Second Edition. Price, Re. 1-4.

Pride and Prejudice, edited by Ferrand E. Corley, M.A., Professor of History, Madras Christian College, Fellow of the University of Madras. Price, Re. 1-4.

Bride of Lammermoor, edited by H. Martin, M.A., Principal, Islamia College, Peshawar. Price, Re. 1-8.

Hajji Baba of Isphan, edited by H. Martin, M.A., Principal, Islamia College, Peshawar. Price, Re. 1-8.

A Book of Golden Deeds, edited by Egerton Smith, M.A., I. E. S., Professor of English Literature, Dacca College. Price, Re. 1-4.

Tanglewood Tales, edited by P. E. Richards, B.A., Professor of English Literature, Islamia College, Lahore. Price, Re. 1-6.

COOPER—Publishers—BOMBAY.

MADRAS UNIVERSITY REFORM PROPOSALS

An Act to provide for the reorganization of the Madras University.

WHEREAS it is expedient to reorganise the University of Madras with a view to establishing a teaching and residential University at Madras while enabling the University to continue to exercise due control over the quality and character of the teaching given by colleges which constitute and are affiliated to the University of Madras it is hereby enacted as follows:—

1. *Short title and commencement.*—(1) This Act may be called the Madras University Act, 1922.

(2) This section shall come into force at once. The rest of this Act shall, save as otherwise expressly provided herein, come into force on such date or dates as the Local Government may, by notification in the Gazette appoint, and different dates may be appointed for different provisions of this Act.

2. *Definitions.*—In this Act, unless there is anything repugnant in the subject or context—

(a) '*Affiliated College*' means a college situated outside the limits of the University of Madras, which was affiliated to the University of Madras as constituted prior to the commencement of this Act or which is admitted to the privileges of affiliation with the University under conditions described in the Statutes.

(b) '*Constituent College*' means an institution maintained or recognized by the University in accordance with the provisions of this Act in which instruction is provided under conditions prescribed in the Statutes and is situated within the limits of the University.

(c) '*First-grade College*' means a college which submits its students to examinations qualifying for degrees other than professional degrees.

(d) '*Hostel*' means a unit of residence for students of the University maintained or recognized by the University in accordance with the provisions of this Act, to the residents of which tutorial and other supplementary instruction is given under the direction of the University in accordance with the Ordinances.

(e) '*Limits of the University*' means the territory within a radius of ten miles from the Fort St. George.

(f) '*Prescribed*' means prescribed by the Statutes or Ordinances or Regulations.

(g) '*Principal*' means the head of a constituent college or of an affiliated college.

(h) '*Registered graduates*' means graduates of the Madras University registered under provisions of this Act or of the Indian Universities Act, 1904.

(i) '*Second-grade College*' means a college which prepares its students for the Intermediate in Arts Examination and does not submit its students to the Degree Examination in Arts.

(j) '*Statutes, Ordinances and Regulations*' mean respectively the Statutes, Ordinances and Regulations of the University for the time being in force.

(k) '*Teachers*' includes professors, readers, and lecturers and such persons giving instruction in constituent or affiliated colleges or hostels as may be recognized by the University to be teachers.

(l) '*Teachers of the University*' means persons appointed by the University to give instruction in the University on its behalf.

(m) '*University*' means the University of Madras as reconstituted under this Act.

THE UNIVERSITY.

3. (1) The first Chancellor and Vice-Chancellor of the University and the first members of the Court of the Academic Council and of the Council of affiliated Colleges of the University and all persons who may hereafter become such

officers or members, so long as they continue to hold such office or membership, are hereby constituted a body corporate by the name of the University of Madras.

(2) The University shall have perpetual succession and a common seal and shall sue and be sued by the said name.

4. *Vacation of Fellowships.*—As from the date on which section 3 and this section are brought into operation the Chancellor shall cease to exercise his functions under any Act or Act's heretofore in force and the Vice-Chancellor and all other Fellows and Honorary Fellows of the University of Madras as constituted and incorporated by any Act or Act's heretofore in force shall cease to be the Vice-Chancellor and Fellows of the University, respectively.

5. *Powers of the University.*—The University shall have the following powers, namely:—

(1) To provide for instruction in such branches of learning as the University may think fit and to make provision for research and for the advancement and dissemination of knowledge.

(2) To grant to, and confer degrees and other academic distinction on, persons who—

(a) shall have pursued an approved course of study in a constituent or an affiliated college and shall have passed the prescribed examinations of the University, or

(b) are teachers in educational institutions under conditions prescribed and shall have passed the prescribed examinations of the University, or

(c) shall have carried on independent research under conditions prescribed.

(3) To confer honorary degrees or other distinctions on approved persons in the manner laid down in the Statutes.

(4) To provide such lectures and instruction to persons, not being students of the University those studying in affiliated colleges of the University, as the University may determine and grant diplomas to them.

(5) To provide for specialisation of studies in constituent colleges and to organise common laboratories for research work for University students.

(6) To affiliate to itself colleges outside the limits of the University.

(7) To inspect all constituent colleges, hostels and affiliated colleges.

(8) To co-operate with other Universities and authorities in such manner and for such purposes as the University may determine.

(9) To institute professorships, readerships, lectureships and any other teaching posts required by the University and to appoint persons to such professorships, readerships, lectureships and posts.

(10) To recognise teachers as qualified to give instruction in constituent colleges and hostels.

(11) To institute, and award fellowships, scholarships, exhibitions, bursaries and prizes.

(12) To institute, maintain and manage constituent colleges and hostels, to recognise or refuse to recognise constituent colleges and hostels not maintained by the University and to withdraw recognition therefrom.

(13) To demand and receive such fees as may be prescribed.

(14) To supervise and control the residence and discipline of the students of the University and to make arrangements for promoting their health and general welfare; and

(15) To enter into any agreement with the Government or with a private management for the incorporation in the University of any institution under them and for taking over its properties and liabilities and for any other purpose not repugnant to the provisions of this Act.

(16) To do all such other acts and things as may be necessary or desirable to further the objects of the University as a teaching and examining body and to cultivate and promote Arts, Science and Learning.

6. *University open to all classes and creeds.*—The membership of any of the constituent bodies

of the University and all degrees and courses of study in the University shall be open to all persons of either sex of whatever race, creed or class and it shall not be lawful for the University to adopt or impose on any person, any test whatsoever of religious belief or profession in order to entitle him to be admitted thereto as a teacher or student or to hold any office therein or to graduate thereat or to enjoy or exercise any privileges thereof, except where in respect of any particular benefaction accepted by the University such test is made a condition thereof by any testamentary or other instrument creating such benefaction.

7. (1) *Teaching of the University.*—No attendance at any teaching other than that conducted by or under the authority of the University or recognised by the University or by any of the affiliated colleges shall qualify for admission to an examination of the University.

Explanation.—Such teaching shall include lecturing, work in laboratories or workshops and other teaching conducted by the professors, readers and lecturers in accordance with any syllabus prescribed by the Regulations.

(2) The authorities responsible for organizing such teaching shall be prescribed by the Statutes.

(3) The courses of study and curricula shall be prescribed by the Ordinances and subject thereto by Regulations.

8. *Officers of the University.*—The following shall be the officers of the University:—

(1) The Chancellor.

(2) The Vice-Chancellor; and

(3) such other officers as may be declared by the Statutes to be officers of the University.

9. (1) *The Chancellor.*—The Governor of the Presidency of Madras shall be the Chancellor of the University. He shall by virtue of his office be the head of the University and the President of the Court and shall, when present, preside at meetings of the Court and at any Convocation of the University.

(2) Where power is conferred upon him by the Act or Statutes to nominate persons to

authorities and bodies, the Chancellor may, to the extent necessary and without prejudice to such powers, nominate persons to represent communities not otherwise adequately represented.

(3) The Chancellor shall have such other powers as may be conferred on him by this Act or the Statutes.

10. (1) *The Vice-Chancellor.*—The Vice-Chancellor shall be elected by the Court from among persons recommended by the Executive Council, subject to the confirmation of the Chancellor and shall hold office for a term of three years on a salary to be fixed by the Chancellor and subject to such other conditions as may be prescribed.

(2) Where any temporary vacancy in the office of the Vice-Chancellor occurs by reason of leave, illness or other cause, the Executive Council shall, as soon as possible, subject to the approval of the Chancellor, make such arrangements for carrying on the duties of the Vice-Chancellor as it may think fit.

11. (1) *Powers and duties of the Vice-Chancellor.*—The Vice-Chancellor shall be a whole-time officer of the University. He shall be the principal executive and academic officer of the University and shall, in the absence of the Chancellor, preside at meetings of the Court and at any Convocation of the University. He shall be an *ex-officio* member and Chairman of the Executive Council, of the Academic Council and the Council of Affiliated Colleges and shall be entitled to be present and to speak at any meeting of any authority or other body of the University but shall not be entitled to vote thereat unless he is a member of the authority or body concerned.

(2) It shall be the duty of the Vice-Chancellor to see that this Act, the Statutes and the Ordinances are faithfully observed and he shall have all powers necessary for this purpose.

(3) The Vice-Chancellor shall have power to convene meetings of the Court, the Executive Council and the Academic Council.

(4) (a) In any emergency which in the opinion of the Vice-Chancellor requires that immediate

action should be taken, he shall take such action as he deems necessary and shall at the earliest opportunity thereafter report his action to the officer, authority or other body who or which in the ordinary course would have dealt with the matter.

(b) When action taken by the Vice-Chancellor under this sub-section affects any person in the service of the University, such person shall be entitled to prefer an appeal to the Executive Council within fifteen days from the date on which such action is communicated to him.

(5) The Vice-Chancellor shall give effect to the orders of the Executive Council regarding the appointment, dismissal and suspension of the servants and teachers of the University and shall exercise general control over the affairs of the University. He shall be responsible for the discipline of the servants of the University in accordance with this Act, the Statutes and the Ordinances.

(6) The Vice-Chancellor shall exercise such other powers as may be prescribed.

12. *Authorities of the University.* The following shall be the authorities of the University:—

(1) The Court,

(2) The Executive Council,

(3) The Academic Council,

(4) The Faculties,

(5) The Council of Affiliated Colleges, and

(6) such other authorities as may be declared by the Statutes to be authorities of the University.

13. *The Court.*—The Court shall consist of the following persons, namely:—

Class I.—Ex-Officio Members.

(1) The Chancellor,

(2) The Vice-Chancellor,

(3) The Members of the Executive and Academic Councils and of the Council of Affiliated Colleges (who are not elected by the Court to these bodies).

(4) The Director of Public Instruction, Madras.

(5) The Surgeon-General to the Government of Madras,

(6) The Chief Engineer, Public Works Department,

(7) The Director of Industries,

(8) The Director of Agriculture,

(9) The Principals of first-grade colleges,

(10) The Principals of constituent colleges other than Arts Colleges, and

(11) The Principals of first-grade affiliated colleges.

Class II.—Life Members.

Such persons as may be appointed by the Chancellor to be life members on the ground that they have rendered eminent services to education.

All persons who have made donations of not less than Rs. 25,000 to or for the purposes of the University.

Class III.—Other Members.

(1) Twenty-five members elected by the registered graduates from among their own body.

(2) Ten members elected by the non-official members of the Legislative Council of Madras from among their own body.

(3) Five persons elected by the Principals of second-grade Colleges.

(4) Three members elected by the Corporation of Madras from among their own body.

(5) One representative each of the Madras Chamber of Commerce and of the Southern India Chamber of Commerce.

(6) Every Association making a donation of not less than Rs. 25,000 and every individual making a donation of not less than Rs. 10,000 and every Association or individual making an annual contribution of not less than Rs. 5,000 to or for the purposes of the University shall be entitled to nominate one member to the Court who shall be a member for five years or as long as the annual contribution continues as the case may be.

(7) Donors of sums of not less than Rs. 500 and not more than Rs. 10,000 to or for the pur-

poses of the University shall elect such number of persons not exceeding ten as the Chancellor may fix to be members of the Court.

(8) Twenty-five members nominated by the Chancellor of whom not less than fifteen may be appointed to secure the representation of communities not otherwise adequately represented.

Save as otherwise provided, members of the Court other than *ex-officio* members shall hold office for a period of three years; provided however that a member appointed or elected as a member of a particular body or as the holder of a particular post shall hold office so long only within that period as he continues to be a member of that body or the holder of that post as the case may be.

14. (1) *Meetings of the Court.*—The Court shall on a date to be fixed by the Vice-Chancellor meet once a year at a meeting to be called the Annual Meeting of the Court.

(2) The Vice-Chancellor may, whenever he thinks fit, and shall, upon a requisition in writing signed by not less than 35 members of the Court, convene a special meeting of the Court.

15. (1) *Powers and duties of the Court.*—The Court shall be the supreme governing body of the University and shall have power to review the Acts of the Executive and Academic Councils (save when such Councils have acted in accordance with powers conferred upon them under this Act or the Statutes) and shall exercise all the powers of the University not otherwise provided for by this Act, the Statutes, the Ordinances and the Regulations.

(2) Subject to the provisions of this Act the Court shall exercise the following powers and perform the following duties, namely:—

- (a) of making Statutes and of amending or repealing the same.
- (b) of considering and cancelling Ordinances;
- (c) of considering and passing resolutions on the annual report, the annual accounts and the financial estimates.

(3) The Court shall exercise such other powers and perform such other duties as may be conferred or imposed upon it by this Act or the Statutes.

16. *The Executive Council.*—The Executive Council shall consist of the following persons, namely:—

Class I.—Ex-officio Members.

- (1) The Vice-Chancellor.
- (2) The Director of Public Instruction, Madras.

Class II.—Other Members.

- (1) Six members elected by the Court at its annual meeting from among its members.
- (2) Two members elected by the Academic Council from their own body.
- (3) Two members elected by the Council of Affiliated Colleges from their own body.
- (4) Two members appointed by the Chancellor. Members other than *ex-officio* members shall hold office for a period of three years provided that a member appointed or elected as a member of a particular body or as the holder of a particular post shall hold office so long only within that period, as he continues to be a member of that body or the holder of that post as the case may be.

17. *Powers and duties of the Executive Council.*—The Executive Council—

- (a) shall hold, control and administer the property and funds of the University;
- (b) shall direct the form, custody and use of the common seal of the University.

(c) shall, subject to the powers conferred by this Act on the Vice-Chancellor, regulate and determine all matters concerning the University in accordance with this Act, the Statutes and the Ordinances provided that no action shall be taken by the Executive Council in respect of the fees paid to examiners and the number, qualifications and the emoluments of teachers, otherwise than after consideration of the recommendations of the Academic Council;

(d) shall lay before the Local Government annually a full statement of all the requests received by it for financial assistance from any institution associated with the University together with its views thereon;

(e) shall frame the budget of the University;

(f) shall administer any funds placed at the disposal of the University for specific purposes;

(g) shall, save as otherwise provided by this Act or the Statutes, appoint the teachers and other servants of the University, shall fix their emoluments and shall define their duties and the conditions of their service and shall provide for the filling of temporary vacancies in their posts;

(h) shall have powers to accept bequests, donations and transfers of any movable or immovable properties to the University on its behalf provided that all such bequests, donations and transfers shall be reported to the Court at its next meeting;

(i) shall arrange for and direct the inspection of all constituent colleges, hostels and affiliated colleges;

(j) shall appoint examiners after consideration of the recommendations of the Academic Council;

(k) shall publish the results of the University examinations; and

(l) shall exercise such other powers and perform such other duties as may be conferred or imposed on it by this Act or the Statutes.

18. *The Academic Council.*—The Academic Council shall be the academic body of the University and shall subject to the provisions of this Act and the Statutes have the control and general regulation and, be responsible for the maintenance of standards of teaching and examination within the University and shall exercise such other powers and perform such other duties as may be conferred or imposed on it by the Statutes. The constitution of the Academic Council and the term of office of its members other than *ex-officio* members, shall be prescribed by the Statutes.

19. *The Faculties.*—The University shall include Faculties of Arts, Science, Law, Medicine, Engineering, Teaching, Commerce and Agriculture and such other Faculties as may be prescribed by the Statutes. Each Faculty shall comprise such departments of teaching as may be prescribed by the Ordinances. The constitution and functions of the Faculties shall be prescribed by the Statutes. There shall be Boards of Studies attached to each department of teaching, the constitution and powers of which shall be prescribed by the Statutes.

20. *Council of Affiliated Colleges.*—The constitution of the Council of Affiliated Colleges and of such other authorities as may be declared by the Statutes to be authorities of the University shall be provided for in the manner prescribed by the Statutes.

21. (1) *Powers of the Council of Affiliated Colleges.*—The Council of Affiliated Colleges shall have the following powers:—

(a) To constitute in accordance with any Ordinances passed by the Executive Council, committees of courses of studies in the various subjects or groups of subjects included in the courses for affiliated colleges, provided that in each such committee at least three-fourths of the members shall be teachers in affiliated colleges and two members shall be appointed by the Academic Council;

(b) to appoint such special or standing committees as it may consider desirable;

(c) to advise the Executive Council and the Academic Council on any matter affecting affiliated colleges;

(d) to draft Ordinances and submit the same to the Academic Council or to the Executive Council as the case may be; and

(e) to advise the Executive Council on the affiliation of any institution beyond the limits of the University.

(2) The Council of Affiliated Colleges shall exercise such other powers and perform such

other duties as may be conferred or imposed upon it by the Statutes.

22. Statutes, Ordinances and Regulations.—Subject to the provisions of this Act, the Statutes may provide for all or any of the following matters, namely:—

- (a) The holding of an annual Convocation to confer degrees;
- (b) the conferment of honorary degrees;
- (c) the institution and award of fellowships, scholarships, exhibitions, bursaries, medals and prizes;
- (d) the conditions of service of the Vice-Chancellor;
- (e) the powers and duties of the officers of the University other than the Chancellor;
- (f) the constitution, powers and duties of the authorities of the University;
- (g) the conditions of affiliation with the University of affiliated colleges;
- (h) the institution and maintenance of constituent colleges and hostels;
- (i) the classification and the mode of appointment of the teachers of the University;
- (j) the constitution of a pension or a provident fund for the benefit of the teachers and other servants of the University;
- (k) the maintenance of a register of registered graduates;
- (l) the discipline of students; and
- (m) all matters which by this Act are to be or may be prescribed by the Statutes.

23. (1) Statutes how made.—The first Statutes shall be those set out in Schedule I.

(2) The Statutes may be amended or repealed or added to by Statutes made by the Court in the manner hereinafter appearing.

(3) The Court may of its own motion take into consideration the draft of any Statutes; provided that in any such case before a Statute is passed affecting the powers or duties of any officer or authority or Board, the opinion of the Executive Council and a report from the person or body

concerned shall have been taken into consideration by the Court.

(4) The Executive Council may propose to the Court the draft of any Statute to be passed by the Court. Such draft shall be considered by the Court at its next succeeding meeting. The Court may approve such draft and pass the Statute or may reject it or return it to the Executive Council for reconsideration either in whole or in part together with any amendments which the Court may suggest. After any draft so returned has been further considered by the Executive Council together with any amendments suggested by the Court, returned thereto, it shall be again presented to the Court with the report of the Executive Council thereon and the Court may then deal with the draft in any way it thinks fit.

(5) Where any Statute has been passed by the Court or a draft of a Statute has been rejected by the Court it shall be submitted to the Chancellor who may refer the Statute or draft back to the Court for further consideration or in the case of a Statute passed by the Court, assent thereto or withhold his assent. A Statute passed by the Court shall have no validity until it has been assented to by the Chancellor.

(6) The Executive Council shall not propose the draft of any Statute or of any amendment to a Statute—

(a) affecting the status, powers or constitution of any authority of the University until such authority has been given an opportunity of expressing an opinion upon the proposal; any opinion so expressed shall be in writing and shall be considered by the Court and shall be submitted to the Chancellor; or

(b) affecting the conditions of affiliation of affiliated colleges, with the University except after consultation with the Academic Council and the Council of Affiliated Colleges.

24. Ordinances.—Subject to the provisions of this Act and the Statutes, the Ordinances may

provide for all or any of the following matters, namely:—

(a) The admission of students to the University and the levy of fees in colleges maintained by the University;

(b) the courses of study to be laid down for all degrees and diplomas of the University;

(c) the conditions under which students shall be admitted to the degree or diploma and to the examinations of the University and shall be eligible for degrees and diplomas;

(d) the conditions of residence of the students of the University and the levy of fees for residence in hostels maintained by the University;

(e) the recognition of constituent colleges and hostels not maintained by the University;

(f) the number, qualifications and emoluments of teachers of the University;

(g) the fees to be charged for courses of teaching given by teachers of the University, for tutorial and supplementary instruction given by the University, for admission to the examinations, degrees and diplomas of the University and for the registration of graduates;

(h) the formation of departments of teaching in the faculties;

(i) the conditions subject to which persons who may be permanently employed in future may be recognised as qualified to give instruction in constituent colleges and hostels;

(j) the conditions, mode of appointment and duties of examiners;

(k) the conduct of examinations, and

(l) all matters which by this Act or by the Statutes are to be or may be provided for by the Ordinances.

25. (1) Ordinances how made.—Save as otherwise provided in this section, Ordinances shall be made by the Executive Council.

Provided that the Executive Council shall consult the Academic Council in making Ordinances—

(a) affecting the admission of students or prescribing examinations to be recognised as equivalent to the University examinations or the further qualifications mentioned in sub-section (i) of section 29 for admission to the degree courses of the University;

(b) affecting conditions and mode of appointment and duties of examiners and the conduct or standard of examinations or any course of study except in accordance with a proposal of the faculty or faculties concerned;

(c) relating to courses, examinations and the conditions upon which students of affiliated colleges shall be admitted to examinations, for the degrees of the University;

(d) affecting the conditions of residence of students.

(2) All Ordinances made by the Executive Council shall have effect from such date as it may direct, but every Ordinance so made shall be submitted as soon as may be to the Chancellor and the Court and shall be considered by the Court at its next succeeding meeting. The Court shall have power by a resolution passed by a majority of not less than two-thirds of the members present at such meeting to cancel any such Ordinance and such Ordinance shall from the date of such resolution, be void.

(3) The Chancellor may at any time after any Ordinance has been considered by the Court signify to the Court and the Executive Council his disallowance of such Ordinance and from the date of receipt by the Executive Council of intimation of such disallowance, such Ordinance shall become void.

(4) The Chancellor may direct that the operation of any Ordinance shall be suspended until he has had an opportunity of exercising his power of disallowance. An order of suspension under this sub-section shall cease to have effect on the expiration of one month from the date of such order or on the expiration of fifteen days from

the date of consideration of the Ordinance by the Court, whichever period expires later.

26. (1) *Regulations*.—The authorities of the University may make Regulations consistent with this Act, the Statutes and the Ordinances—

(a) laying down the procedure to be observed at their meetings and the number of members required to form a quorum;

(b) providing for all matters which by this Act, the Statutes or the Ordinances are to be prescribed by the Regulations; and

(c) providing for all other matters solely concerning such authorities and not provided for by this Act, the Statutes and the Ordinances.

(2) Every authority of the University shall make regulations providing for the giving of notice to the members of such authority of the dates of meetings and of the business to be considered at meetings and for the keeping of a record of the proceedings of meetings.

(3) The Executive Council may direct the amendment in such manner as it may specify of any regulations made under this section or the annulment of any regulation made under sub-section (1) provided that any authority which is dissatisfied with any such direction may appeal to the Chancellor who after obtaining the views of the Executive Council may pass such orders as he thinks fit.

27. *Residences and hostels*.—Every student of the University shall reside in a hostel or under such conditions as may be prescribed.

28. (1) *Colleges and hostels*.—Colleges and hostels maintained by the University shall be such as may be named by the Statute.

(2) Colleges and hostels other than those maintained by the University shall be such as may be recognised by the Executive Council on such general or special conditions as may be prescribed by the Ordinances.

(3) The condition of residence in hostels shall be prescribed by the Ordinances and every college or hostel shall be subject to inspection by

any authority or officer of the University authorized in this behalf by the Executive Council.

(4) The Executive Council shall have power to suspend or withdraw the recognition of any college or hostel which is not conducted in accordance with the conditions prescribed by the Ordinances. Provided that no such action shall be taken without affording the Committee of Management of such college or hostel an opportunity of making such representation as it may deem fit.

29. (1) *Admission to the University courses*.—Students shall not be eligible for admission to a course of study for a degree unless they have passed the Intermediate in Arts Examination of Madras or an examination recognised by the University as equivalent thereto and possess such further qualifications, if any, as may be prescribed by the Ordinances.

(2) Every student admitted to a course of study for a degree shall unless exempted from the provisions of this sub-section by a special order of the Executive Council made on the recommendation of the Academic Council be enrolled as a member of a constituent college or of an affiliated college. Any such exemption may be made subject to such conditions as the Executive Council may think fit.

(3) Students exempted from the provisions of sub-section (2) and students admitted in accordance with the conditions prescribed to courses of study other than courses of study for a degree shall be non-collegiate students of the University.

30. *Annual report*.—The annual report of the University shall be prepared under the direction of the Executive Council and shall be submitted to the Court on or before such date as may be prescribed by the Statutes and shall be considered by the Court at its next annual meeting. The Court may pass resolutions thereon and communicate the same to the Executive Council which shall take such action as it thinks fit in cases where these resolutions imply, suggest or

propose action. The Executive Council shall inform the Court of the action taken by it and when no action is taken of its reasons therefor. A copy of the report shall be submitted to the Local Government for information with a copy of the resolutions, if any, of the Court.

31. (1) *Annual accounts*.—The annual accounts and *balance sheet* of the University shall be prepared under the direction of the Executive Council and shall be submitted to such examination and audit as the Local Government may direct.

(2) The accounts when audited shall be published by the Executive Council in the *Fort St. George Gazette* and copies thereof shall together with copies of audit report be submitted to the Court and the Local Government.

(3) The Executive Council shall also prepare before such date as may be prescribed by the Statutes the financial estimates for the ensuing year.

(4) The annual accounts and the financial estimates shall be considered by the Court at its annual meeting and the Court may pass resolutions with reference thereto and communicate the same to the Executive Council which shall take them into consideration and take such action thereon as it thinks fit or inform the Court when no action is taken of its reasons therefor.

SUPPLEMENTARY PROVISIONS.

32. *Removal from membership of the University*.—The Court on the recommendation of not less than two-thirds of the members of the Executive Council for the time being in India remove the name of any person from the register of graduates and remove any person from membership of any authority of the University on conviction by a Court of Law of what in the opinion of the Court is a serious offence involving moral delinquency or if he has been guilty of scandalous conduct and for the same reasons may withdraw any degree or diploma conferred or granted by the University.

33. *Disputes as to constitution of University authority or bodies*.—If any question arises whe-

ther any person has been duly elected or appointed as or is entitled to be a member of any authority or other body of the University the matter shall be referred to the Chancellor whose decision thereon shall be final.

34. *Constitution of committees*.—Where any authority of the University is given power by this Act or by the Statutes to appoint committees, such committees shall unless there is some special provision to the contrary consist of members of the authority concerned and of such other persons (if any) as the authority in each case may think fit.

35. *Filling of casual vacancies*.—All casual vacancies among the members (other than *ex-officio* members), of any authority or other body of the University shall be filled as soon as conveniently may be by the person or body who appointed, elected, or co-opted the members whose place has become vacant and the person appointed, elected or co-opted to a casual vacancy shall be a member of such authority or body for the residue of the term for which the person whose place he fills would have been a member.

36. *Proceedings of the University and bodies not invalidated by vacancies*.—No act or proceeding of any authority or other body of the University shall be invalidated merely by reason of the existence of a vacancy or vacancies among its members.

37. (1) *Conditions of service*.—Every salaried officer and teacher of the University shall be appointed on a written contract.

The contract shall be lodged with the Registrar of the University and a copy thereof shall be furnished to the officer or teacher concerned.

(2) Any member of the public service in India whom it is proposed to appoint to a post in the University shall, subject to the approval of such appointment by the Government have the option:

(i) of having the services lent to the University for a specific period and remaining liable to recall to Government service at the discretion of the Government at the end of that period, or—

(ii) of resigning Government service on entering the service of the University. Provided however that nothing in this section shall prohibit the employment of a member of the public services as a part-time servant of the University with the approval of the Government.

38. Tribunal of arbitration.—Any dispute arising out of a contract between the University and any officer or teacher of the University shall on the request of the officer or teacher concerned be referred to a tribunal of arbitration consisting of one member appointed by the Executive Council, one member nominated by the officer or teacher concerned and an umpire appointed by the Chancellor. The decision of the tribunal shall be final and no suit shall lie in any civil court in respect of the matters decided by the tribunal. Every such request shall be deemed to be a submission to arbitration upon the terms of this section within the meaning of the Indian Arbitration Act, 1899, and all the provisions of that Act with the exception of section 2 thereof shall apply accordingly.

39. Funds of the University.—The University shall have a fund. In addition to its revenue from fees, income from endowments and grants if any, the Government shall contribute annually towards the funds of the University—

(a) a sum equal to the annual contribution of the Government of Madras prior to 1922 made for University purposes;

(b) such sum or sums and on such terms as Government may consider desirable towards the salaries of the Vice-Chancellor and of such Professors and Lecturers as are appointed by the University for higher research and advancement and dissemination of knowledge in particular branches of learning.

40. The Government may at any time after the passing of this Act transfer the control and management of any of its institutions on such terms and conditions as it may deem proper. In the event of an agreement for the transfer of any such institution the Government shall con-

tribute every year to the funds of the University a sum equivalent to the average annual expenditure incurred from Provincial Funds on the institution during the three years immediately preceding the year of such transfer.

TRANSITORY PROVISIONS.

41. Completion of course for students in colleges affiliated to the Madras University under previous Act.—Notwithstanding anything contained in this Act or the Ordinances any student of a college affiliated to the University of Madras established under Act VIII of 1904, who was studying for any examination of the said University shall be permitted to complete his course in preparation therefor and the University shall provide for such students instructions and examinations in accordance with the prospectus of studies of that University.

42. Appointment of First Vice-Chancellor.—Notwithstanding anything contained in sub-section (1) of section 10 soon after the passing of this Act the first Vice-Chancellor shall be appointed by the Chancellor on a salary to be fixed by him for a period not exceeding three years and on such other conditions as he thinks fit.

43. (1) (a) First appointments of University staff.—At any time after the passing of this Act and until such time as the authorities of the University shall have been duly constituted any officer of the University may be appointed by the Vice-Chancellor with the previous sanction of the Chancellor, provided that, no such appointment shall be made until financial provision has been made therefor.

(b) Teachers of the University shall be appointed by the Chancellor after considering the recommendations of an Advisory Committee consisting of the Vice-Chancellor, the Director of Public Instruction, Madras, and such other person or persons if any as the Chancellor thinks fit to associate with them.

(2) Any appointment made under sub-section (1) shall be for such period not exceeding three years and on such conditions as the appointing authority thinks fit.

44. At any time after the passing of this Act if the Provincial Government is satisfied that other and adequate arrangements have been made for the conduct of examinations forming an entrance to this University and for the supervision and control of institutions preparing for such examinations, the Local Government may by notification in the Gazette direct that the said University shall cease to exercise any control over the recognition of such institutions and from the date of such notification the University shall cease to exercise such control.

45. The Vice-Chancellor appointed under section 42 shall until sections 3 and 4 are brought into operation have power—

(a) with the previous approval of the Chancellor to make additional Statutes to provide for any matter not provided for by the first Statutes;

(b) to constitute provisional authorities and bodies and on their recommendation, make rules providing for the conduct of the work of the University;

(c) subject to the control of the Local Government, to make such financial arrangement as may be necessary to enable this Act or any part thereof to be brought into operation;

(d) with the sanction of the Chancellor to make such appointments as may be necessary to enable this Act or any part thereof to be brought into operation;

(e) to appoint committees as he may think fit to discharge such of his functions as he may direct; and

(f) generally to exercise all or any of the powers conferred on the Executive Council by this Act or the Statutes.

46. Repeal of certain enactments.—As from the date on which sections 3 and 4 are brought into operation the enactments specified in Schedule II shall be repealed to the extent specified in the fourth column thereof.

SCHEDULE I.

THE FIRST STATUTES OF THE UNIVERSITY.

(See Section 23.)

I. Definition.—In these Statutes unless there is anything repugnant in the subject or context—

(a) The 'Act' means the Madras University Act, 1922, and 'section' means a section of the Act and 'clause' or 'sub-clause' means a clause or sub-clause of this Schedule; and

(b) 'Officers,' 'Authorities,' 'Professors,' 'Readers,' 'Lecturers,' 'Teachers,' 'Servants,' and 'Registered Graduates' mean respectively, Officers, Authorities, Professors, Readers, Lecturers, Teachers, Servants and Registered Graduates of the University.

II. Powers of the Executive Council.—Subject to the provisions of the Act, the Executive Council shall have the following powers, namely—

(a) to institute at its discretion such Professorships, Readerships, Lectureships or other teaching posts as may be proposed by the Academic Council,

(b) to abolish or suspend after report from the Academic Council thereon any professorship, readership, lectureship, or other teaching post;

(c) to provide the buildings, premises, furniture, apparatus, equipment and other means needed for carrying on the work of the University;

(d) to invest any moneys belonging to the University including any unapplied income in any of the securities described in Section 20 of the Indian Trusts Act, 1882, or in the purchase of immovable property in India with the like power of varying such investments or to place on fixed deposit in any Bank approved in this behalf by the Local Government, any portion of such moneys not required for immediate expenditure; and

(e) to institute and manage constituent colleges and hostels.

III. (i) The Academic Council.—The members of the Academic Council in addition to the Vice-Chancellor shall be—

CLASS I.—EX-OFFICIO MEMBERS.

- (1) The Director of Public Instruction, Madras;
- (2) The Chairman of Boards of Studies;
- (3) The Professors and such Readers as are heads of departments of teaching;
- (4) The Principals of first-grade Colleges and Affiliated Colleges;
- (5) The Principals of Professional and Technical Colleges.

CLASS II.—OTHER MEMBERS.

- (1) Five Principals of second-grade colleges elected by the Principals of second-grade colleges.
- (2) Five members elected by the Court from its own body who are not engaged in teaching nor members of the Executive Council.
- (3) Three such members of the Council of Affiliated Colleges as are connected with affiliated colleges elected by the Council.
- (4) Three members nominated by the Chancellor.

(ii) The Academic Council as constituted under sub-clause (i) may co-opt as members teachers of the University not exceeding one-tenth of its number as so constituted.

(iii) Members other than *ex-officio* members shall hold office for a period of three years provided that persons appointed or elected as representatives of any particular body shall hold office so long only within the said period as they continue to be members of that body.

IV. *Powers of the Academic Council.*—Subject to the provisions of the Act the Academic Council shall have the following powers, namely—

- (a) to advise the Executive Council on all academic matters;
- (b) to make proposals to the Executive Council for the institution of professorships, readerships, lectureships, or other teaching posts and in regard to the duties and emoluments thereof;
- (c) to make regulations for and to award in accordance with such regulations medals and other rewards;

(d) to constitute committees of itself, Faculties in Arts, Science, Law, Medicine, Engineering, Teaching, Commerce and Agriculture and such other subjects as may be prescribed by the Statutes;

(e) to recommend to the Executive Council the names of persons suitable for appointment as Examiners and Assistant Examiners;

(f) to control and manage the University library or libraries, to frame regulations regarding their use and to appoint a Library Committee under the general control of the Academic Council to manage the affairs of the library;

(g) to formulate, modify or revise subject to the control of the Executive Council, schemes for the constitution or re-constitution of departments of studies and for the assignment of subjects to such departments of studies;

(h) to assign teachers to the departments of studies;

(i) to promote research within the University and to require reports on such research from the persons engaged thereon and to make recommendations to the Executive Council thereon;

(j) to forward to the Executive Council or refer back but not to amend the draft of any Ordinance prepared by the Council of Affiliated Colleges relating to courses, examinations and the conditions upon which students of such colleges will be admitted to examinations for the degrees of the University.

V. *The Registrar.*—The Registrar shall act as the Secretary of the Court, of the Executive Council, of the Academic Council and of the Council of Affiliated Colleges; he shall, subject to the control of the Executive Council, manage the property and investments of the University. He shall be responsible for the presentation of the annual estimates and statements of accounts. Subject to the powers of the Executive Council, he shall be responsible for seeing that all moneys are expended on the purposes for which they are granted or allotted.

All contracts shall be signed by the Registrar on behalf of the University. He shall exercise such other powers and perform such duties as may be prescribed by the Statutes and the Ordinances.

VI. (1) *Affiliated colleges.*—No institution shall be admitted to affiliation with the University as an affiliated college within the limits of the territorial jurisdiction of the University nor shall any constituent college be started within such limits except by the University.

(2) Subject to the provision of clause (6) of Section 5 no educational institution shall be an affiliated college unless it satisfies the requirements of Ordinances in regard to the following particulars:—

- (i) The number of students in each class,
- (ii) the number, pay and tenure of office of the teachers,
- (iii) the organisation and government, and
- (iv) equipment and arrangements for the accommodation and residence of students. Provided that no decision affecting the status of an affiliated college shall be arrived at except after consultation with the Council of Affiliated Colleges.

VII. (1) The Council of Affiliated Colleges shall consist in addition to the Vice-Chancellor of the following:—

- (i) the Principals of Affiliated Colleges;
- (ii) six representatives of District Boards and one representative of every municipality where an affiliated college is situate;
- (iii) one person elected by the teachers of each of the affiliated colleges;
- (iv) ten persons nominated by the Chancellor; and
- (v) teachers of the University to be appointed by the Academic Council.

(2) The number of teachers to be appointed under head (v) of sub-clause (1) shall be determined by the Academic Council. Provided that the total number so appointed shall not exceed one-fourth of the whole Council.

(3) Members other than *ex-officio* members shall hold office for a period of three years provided that persons appointed or elected as representa-

tives of any particular body shall hold office so long only within the said period as they continue to be members of that body.

VIII. (1) *The Executive Committee of Affiliated Colleges.*—There shall be an Executive Committee of the Council of Affiliated Colleges which shall consist of—

- (i) the Vice-Chancellor, and
- (ii) ten persons to be appointed by the Council from its own body.

(2) The Vice-Chancellor shall be the Chairman of the Executive Committee which shall appoint its own Vice-Chairman.

(3) Members appointed under head (ii) of sub-clause (1) shall hold office for three years or for so long only as they continue to be members of that body.

IX. *Powers of the Executive Committee.*—The Executive Committee shall subject to the general control of the Council of Affiliated Colleges have the following powers, namely:—

(a) It shall report to the Executive Council upon all applications for grant from Government in aid of any affiliated college.

(b) It shall administer the funds of the Council of Affiliated Colleges including the receipts from examination fees and grants from any source which shall be kept separate from the general funds of the University and it shall lay before the Executive Council for its approval annual estimates of receipts and expenditure.

(c) It shall be empowered to submit proposals to the Council of Affiliated Colleges—

- (i) for supplementing the teaching provided by these colleges, and
- (ii) regarding the acceptance of endowments by the said Council for such purposes.

X. (a) *Colleges and hostels.*—Every constituent college or hostel not maintained by the University shall be managed by a Committee of Management appointed by the person or body maintaining the college or hostel the constitution of which shall be reported to the Executive Council.

(b) The appointment of teachers and superintending staff of every such college or hostel shall

be made by the Committee of Management, or by any authority to whom such body may have delegated the power and all such appointments shall be subject to the approval of the Executive Council.

(c) Every student not being a teacher and not residing in a hostel shall be attached to a constituent college or hostel for tutorial help and disciplinary supervision and for such other purposes as may be prescribed by the Ordinances.

XI. *Honorary degrees.*—The Executive Council may, either of its own motion or on the recommendation of the Academic Council, make proposals for the conferment of honorary degrees to the Court and shall after the Court assents thereto submit such proposals to the Chancellor for confirmation. Provided that in case of urgency the Chancellor may act on the recommendation of the Executive Council only.

XII. (1) All arrangements for the conduct of examinations shall be made and all examiners shall be appointed by the Executive Council.

(2) If, during the course of examination, any examiner is for any cause incapable of acting as such, the Vice-Chancellor shall appoint an examiner to fill the vacancy.

(3) At least one examiner who is not a teacher in a constituent college shall be appointed for each subject included in a department of teaching.

(4) The Academic Council shall appoint examination committees consisting of members of its own body or of other persons or of both as it thinks fit to moderate examination questions, to prepare the results of examinations and to report such results to the Executive Council for publication. The Academic Council shall also appoint one member from its own body to be Chairman of all such committees.

XIII. (1) There shall be constituted for the benefit of the officers, teachers and other servants of the University such pension or provident funds as the Court may deem fit.

(2) Where such pension or provident fund has been constituted the Governor-General in Council may declare that the provisions of the Provident Fund Act, 1897, shall apply to such fund as if it were a Government Provident Fund.

XIV. All graduates of the University or of the University of Madras as constituted immediately prior to the commencement of this Act, of seven years' standing and upwards shall on payment of such fees as may be prescribed by the Ordinances be entitled to have their names enrolled in the register of registered graduates and upon such enrolment, to enjoy all the privileges of registration.

SCHEDULE II.

ENACTMENTS REPEALED.

(See Section 46.)

Year.	Number.	Short Title.	Extent of Repeal.
1857	XXVII	The Madras University Act, 1857.	So much as is unrepealed.
1904	VIII	The Indian Universities Act, 1904.	In sub-section (1) of section 6, the word 'Madras.' In sub-section (2) of section 12, the word 'Madras.' In the first schedule the heading, 'The University of Madras', and the entries under that heading.

MADRAS UNIVERSITY BILL.

COMMENTS AND CRITICISM.

MR. SATYAMURTI'S ADDRESS.

MR. SESHAGIRI AIYAR'S VIEWS.

Mr. S. Satyamurti addressed a crowded gathering recently at the Y.M.C.A. Auditorium, on the subject of the Madras University R-form Bill. The meeting was organised by the Presidency Students' Union and was presided over by Mr. T. V. Seshagiri Aiyar.

THE CHAIRMAN.

The Chairman said that the public of Madras owed a deep debt of gratitude to the Hon'ble the Minister of Education for the wise step he took in framing a Bill for reorganising the Madras University on the lines recommended by the Sadler Commission. He, however, hoped that Mr. Patro as the spokesman of the Government had not committed himself to the details of the Bill. That would be disastrous because even a cursory glance of the Bill would show that it required considerable modifications before it could take the final shape. According to the preamble, the object of the Bill was to make the present University a teaching and residential one: but he supposed it was not intended thereby to abolish altogether the examining side, for any attempt in that direction would be against the best opinion in the Presidency. If therefore the examining side of the University should be grafted on to the teaching side, the question would arise whether both these should be put in charge of the same set of officers and if so whether it would not lead to considerable difficulty and confusion, or if not, the cost of maintaining two sets of officers separately for teaching and examining would not be such as they could not afford. This was a matter that required careful looking into. As regards the machinery provided for in the Bill to carry out the reform, he could not help saying it was so

complex that the work would be duplicated and be found to be unsatisfactorily performed. The Bill as put forward now, lacked both simplicity and directness. The question of cost was a serious difficulty. If there should be a teaching University in Madras, there must be at least one or two in the mofussil. He understood the Education Minister to be of opinion that one University should be had for the north and another for the south. The cost for three Universities would be enormous, and he did not think that the people would cheerfully come forward to bear the burden. It was desirable and necessary that the public should be told beforehand that the contemplated reforms would entail extra cost and they must be prepared for extra taxation.

MR. SATYAMURTI.

Mr. Satyamurti said that the cry was in the air for reform of all kinds and large sympathies were extended to the Minister for Education, for his attempt at reforming the Madras University. But he would warn Mr. Patro against believing that moving was always advancing or that changing was always progressing. The genesis of the proposed Bill was found in the interminable volumes of the Sadler Commission Report, much of which was absolutely irrelevant to the conditions obtaining in Madras; and Mr. Patro had laboriously copied from that Report for the purpose of his Bill. The speaker was not against copying; only he desired it must not be forgotten that imitation was suicide.

Speaking of the main features of the Bill, Mr. Satyamurti said he was deliberately of opinion that "teaching and residential" was an overworked phrase and they could not create a teaching and residential University by merely changing the nomenclature. To establish a really teaching and residential University, they could not afford and they did not want it. He did not think it was possible to have one in a busy commercial city such as Madras. Where was the money to come from? It was said that the Minister was arranging for money. After

all, it was the tax-payer that had to pay and although the speaker was an enthusiast in the cause of higher education, he could not, having regard to the colossal poverty of Indians and their still more colossal ignorance, but protest vehemently against the divergence of funds from the legitimate channels of expansion of elementary education towards the creation of a teaching and residential University. Further, it was neither fair nor equitable that people of distant places like Ganjam or Tinnevely should pay taxes to allow Madras the luxury of a teaching and residential University. The proposed constitution of the University was a complicated machinery and notwithstanding the claims that were made for it, was less democratic in powers and composition than the present Syndicate and Senate constituted under the reactionary Curzon's Act of 1904. The mofussil colleges which had so far contributed to the building up of the University and had been part and parcel of the University, were under the Bill made to shift for themselves. The second-grade colleges which had played a distinguished part in the development of higher education in South India were either to cease to exist or to exist merely as glorified High Schools. An elected and paid Vice-Chancellor was another feature of the Bill. He did not think by merely changing the names and by creating a complicated machinery, they could create work for a full-timed Vice-Chancellor. From his knowledge of the working of the University, he would say that for the next ten years at least, an honorary Vice-Chancellor would amply satisfy the requirements of the University. He had only to mention the names of Sir John Wallis, Mr. Justice Oldfield and the Hon. Mr. K. Srinivasa Iyengar who had been Vice-Chancellors of the University in recent years and had given their time, energy and intellect unreservedly in the service of the University. Was it seriously suggested, that under the new era of reforms inaugurated by the popular Minister, it would not be possible to get equally competent persons, except withholding

out the prospect of filthy lucre? They did not want a paid Vice-Chancellor and they could not afford it. The tyranny of experts was yet another feature of the Bill.

Mr. Satyamurti next proceeded to examine the details of the Bill. He said that the limiting of the jurisdiction of the University to ten miles was all right for a country like England but having regard to the fact that India was geographically a very much bigger country, there was no use of copying the phrases of countries of the West. Clause 6 of the Bill threw open to all classes and creeds the membership of any of the constituent bodies of the University as also all degrees and courses of study in the University. He was glad that the same Minister who was responsible for the appointment of Selection Committees for admission into Government Colleges, was responsible for this provision in the Bill. But he must protest against other provisions in the Bill relating to the governing bodies, where it was sought to provide for representation on the basis of community, class and creed. Though the idea of throwing open the membership of constituent colleges to all irrespective of caste or creed, was good and though he was wholeheartedly in sympathy with it, yet there were practical difficulties in the way of carrying out that object. In the case of the Pachaiyappa's College which under the new dispensation would be a constituent college, the admission of students other than Hindus would be construed as being opposed to the conditions of the Trust.

Clause 9 of the Bill provided that the Governor of the Presidency should be the Chancellor of the University and by virtue of his office be the head of the University, the President of the Court and when present preside at meetings of the Court and at any Convocation of the University. Under the Curzonian Act, the Chancellor had no right to be present at or to preside over meetings of the Senate but under the 'new democratic Bill', the Governor who had been deprived of his right to

preside over meetings of the Legislative Council, was made *ex-officio* the President of the Court. Was this provision, he asked, really democratic? Dealing with the composition of the Court, he said the provision was wholly undemocratic. Under the present Act the Senate might consist of no fewer than 50 or not more than 100 members of whom one-fifth or twenty were to be elected, ten by the Registered Graduates and ten by the Faculties. Under the new Bill the maximum was left unsettled but it might be stated on the authority of Mr. C. R. Reddy it would be between 200 or 250. Out of these, 25 were to be elected by the registered graduates. The question was whether 25 out of 250 was greater than 10 out of 100 and yet it was claimed that the Bill was a democratic measure. The *ex-officio* members under the Curzon Act was not more than ten but under Mr. Patro's dispensation they had all kinds of bureaucratic officials, the Chancellor, the Vice-Chancellor, members of the executive and academic councils and of the affiliated colleges, the Director of Public Instruction, the Surgeon-General, the Chief Engineer, the Director of Industries, the Director of Agriculture, the Principals of first-grade colleges and so on. There was a new class of members which the Curzon Act did not compass, Mr. Patro's Bill went back to the provisions prior to 1904, of authorising the Chancellor to appoint as many members as he pleased on account of their having rendered eminent services in the cause of education. He was anxious that the University ought to get as much funds as possible but surely the idea of making donors, members of the Court, irrespective of their academic qualifications, seemed to him to be a strange way of rewarding philanthropy. There was then the provision for the election of ten members by the non-official members of the Legislative Council. This was nothing but giving the right to the Minister for

XXVIII—67

Education for camouflaging ten nominees. If really it was intended that the general public of the Presidency should take a living interest in University education, the more satisfactory method would be to allow the voters of each district to elect a representative of their own to the Court. The Corporation of Madras, and the Chambers of Commerce were given the right of representation; and he could not understand why at all this was needed. Lastly the Governor had the right of nominating 25 members with a view to secure communal representation. In other words the Governor would have the power of nominating members who had no chance of being elected to the Court.

Referring to the powers of the Court, Mr. Satyamurti said, it was really made impotent for all useful purposes of the University. Contrasted with the present Senate which had almost unlimited powers of governance both in the sphere of law making and budget provisions, the new Court with its truncated powers, could in no sense be said to be more democratic. He then dealt with the provisions regarding the executive and academic councils and explained how the former was made practically an autocratic body in the affairs of the University and how in the latter the experiment of dyarchy which had proved a failure in regard to the Legislative Council, was sought to be attempted. He said the provision as to the Council of Affiliated Colleges was nothing but the creation of a caste and pointed out how the relationship between these various bodies would be one of constant friction.

Mr. Satyamurti next devoted his attention to criticising the provisions in respect of powers for making statutes, ordinances and regulations. He said they were reactionary. To-day under the Curzon Act, the Senate could make its own regulations and the Government had only the right of vetoing them; during all the eighteen

years the Act had been in force, the occasion for the exercise of such a veto had not arisen more than once or twice. But under section 23 of Mr. Patro's Bill, it was provided that 'where any statute has been passed by the Court or a draft of statute has been rejected by the Court, it shall be submitted to the Chancellor who may refer the statute or draft back to the Court for further consideration.' There was no such power in the Carzon Act empowering the Chancellor to send back a regulation with the suggestion of incorporating particular terms. In the matter of making ordinances which would govern the daily life of students, teachers, etc., the powers were left entirely in the hands of an autocratic body of 14 people called the Executive Council. If the Syndicate passed a regulation or bye-law, the Senate could overrule it by a bare majority. But under the new Bill, the Court could not interfere with any ordinance of the Executive Council except with two-thirds majority which was practically impossible. Were such provisions democratic, he asked, and was there any justification for introducing reactionary provisions?

As regards the provision for removal of membership from the University, Mr. Satyamurti took exception to the words "Scandalous conduct" and observed it was simply ridiculous that such a phraseology should have been used.

After adverting to one or two other points in the Bill, he summed up the net results of the Bill thus—"no new hostels, no new colleges, no Bodleian Library and no Sheldonian Theatre, no Tagore foundation; the same old lectures, the same old professors, the same old examinations, and the same old cramming. Only the dignity of a new nomenclature, an impotent, unmanageable and assorted Court meeting once a year something like Convocation and 14 tyrants ruling the University. Interminable friction among various bodies, a paid and dignified Vice-Chancellor who will run about in Rolls Royce rivalry and hostility between mofussil and Madras colleges and nothing more."

He quite agreed that real and radical reforms are wanted in the Madras University; but he would not consent to any tinkering with the present constitution. If there should be a change, let them make the Senate four-fifths elective and the Syndicate wholly elected by the Senate. Let them remove the powers of Government interference. They had now a ready-made constitution under which they could provide for higher research, create and equip libraries and laboratories

and give the colleges an individuality. Let Mr. Patro therefore before he laid down his high office, do something to remove from the disgraceful annals of the University the tyranny of examinations, make it possible for graduates to add to the knowledge and wealth of the country and remove the University from its present position of being an exotic plant to that of becoming part and parcel of the surging national life. If he would attempt at reform in these directions, Mr. Patro would earn the undying gratitude of the public not only of Madras but of the whole country.

Mr. Seshagiri Aiyar observed towards the close of the meeting that Mr. Satyamurti had in his lecture been playing the part of the 'Devil's advocate' and hoped that the Advocate-General as the defender of the sanctity of the Bill would in the Senate bring out the good points. Between these two he had no doubt that they would be able to produce a measure which would ultimately benefit the student population. What they were concerned with was not Mr. Patro's reputation or that of the Government but the welfare and interests of the students at large.

With the usual vote of thanks the meeting terminated — *The Hindu*.

TALISMANS AND CHARMS

For those People to Avoid all Sorts of
Misfortunes and Enter the Gates of
Successful Life.

	Rs.
For Honour, Riches, Learning and Greatness	7-8
For Health, Physical Strength, &c.	7-0
For Power of Eloquence, Speeches, &c.	7-8
For Success in any Undertaking or Litigation, &c.	10-8
For Success in Sport, Racing, Cards, Games of Chance, &c.	7-8
For Success in Trade, and Business	100
For Men's Love to Women	7-0
For Women's Love to Men	10-8
For Love of Opposite Sex, attractive power	7-8
For Agricultural Prosperity, Farming, Good Crops, etc.	7-8
For Success in Mining Plumbago, &c.	100-0
Rabbi Solomon's Special Talisman for every success, specially valued and worn by every successful	15-0
Hebrew, 2nd quality	21-0
1st quality	30-0

NOTE.—A Money Order will bring the Talisman to your door. Always the full amount should be paid in advance. No V. P. P.

Extensive Life Readings ... Rs. 15.

D. A. RAM DUTH,
ASTROLOGER.

No. 30, (E.R.) Choku Street,
COLOMBO (CEYLON.)

The Educational Review

A Monthly Record for India.

VOL. XXVIII.]

AUGUST 1922.

[No. 8.]

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

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

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

UNIVERSITY OF MADRAS: CONVOCATION ADDRESS.

By

THE REV. W. MESTON, M.A., B.D., M.L.C.,
Principal, Madras Christian College.

THROUGH what I cannot but regard as the too generous trust of His Excellency the Chancellor, it now falls to my lot to address to you a few words before this day, so memorable in your lives, draws to a close. There is but one consideration that encourages me to discharge this trust for which I have otherwise so few qualifications. It is this: For well nigh a generation I have been among you as a teacher, and a teacher is always a student. I am therefore one of yourselves. With you in your long struggle I sympathise, in your achievement I rejoice, and in your hopes for the future I share. Yet, though in the infectious enthusiasm which radiates from you, the barriers of time seem to be broken down, and the remembrance of a similar day long ago becomes

reinstated with a vividness which makes it almost a present reality, the years still persist in keeping their jealous guard. They serve to remind us, as your teachers, of the privilege which we have enjoyed as we have been brought into such intimate contact with you at a time when the pulsation of life has been more rapid and more strong than perhaps at any previous time in the centuries of your nation's eventful story. And they serve to remind us, as your friends, of the happy relations which have existed between us as, in our common work, differences of race, and faith, and tradition have slipped away, and day by day we have companied with you on the journey of life, contemplating its demands and seeking to prepare a worthy response. And now the crown of our teaching and fellowship is reached; we step aside, and you fare forth by yourselves into a future of splendid promise, to a destiny as magnificent as it is momentous.

To-day you are enrolled as citizens of no mean city; you have become graduates of

this University which compensates by prestige for what it lacks in age. Behind you lie years of toil, disappointment, success, and sacrifice. All these have gone to your making, and you now are clad for a little in these academic robes as the outward expression of a definite inward conviction that, however small may be the material reward, culture has a value that is imperishable and a worth that is indispensable. You don the graduate's gown to proclaim yourself learning's under-graduate. In a world full of action, change, bustle, competition as never before, you remind yourselves, and remind yourselves rightly, that the cultured mind is a garden enclosed, that the owner of it is master of a kingdom, that the user of it is builder of a people.

But the culture which has these results, and which you have in some degree imbibed, is being subjected to a never ceasing test, and it is as ceaselessly holding out to you its challenge. Every year will convince you of that. But there is good reason why this very year in which you graduate should bring home to you the vital test of culture, and face you with its inescapable challenge. For, this year is marked by three memorable events, each one of which is also a departure. It has witnessed the beginning of compulsory education in our Presidency; it has witnessed the beginning of a serious attempt to relate academic pursuits and our higher training with the larger and more practical interests of the country; and it has witnessed the beginning of a definite endeavour to make the interests of the country coincide with the ever-widening interests of the self-governing Dominions of the Empire. And all these events, all these departures, are associated with graduates of this University. The con-

nection is not fortuitous. It serves only to make the note of challenge clearer and more incisive. Let us listen to each of these notes of challenge as it rings out to-day.

I

What is the culture of the University to say to the great masses of the people to whom knowledge is a closed book? The illiterate is at the mercy of prejudice, passion, distortion, bias. He can be swayed by the clever schemer; he can be down-trodden by the clever exploiter. He has not the power to enrich the country by judgment and wisdom; always potentially, and at times in reality, he is a slave. When we look through the reports of the Director of Public Instruction there are pages where our hearts fail us. What mean these tables setting forth in cold figures percentages of children attending school, villages possessing no school, the time spent by children at school? They mean that there are millions of men and women in this land with faculties such as our own who have been shut out from the great and magic realm of knowledge in which we walk with freedom, men and women who have drunk so little of wisdom's stream that the taste of it has no sweetness for them. They mean that there is going on a steady depreciation of the most splendid resources of the country, a weakening of the foundation on which national honour and power are built. And now it has been said at last that this shall not be; this waste must cease; this slavery must be fought till freedom's trumpet rings. It is a heartening call to everyone who takes his or her degree this year—this note of jubilee. This great fight is not to succeed without you. Knowledge to your eyes has unfolded her page and you—you cannot keep it to yourselves. You must unfold that page

to others. By personal influence, by practical interest, by membership of local boards, by the employment of your means when the days of prosperity come—by these methods you can spread education not because the law compels it, but because conscience, your quickened, educated conscience, compels it. In the elementary school lies the hope of the nation. In that school, its pupils often ill-clad and poorly-nurtured, its teachers finding it hard to keep the wolf from the door, its habitation often far from satisfying the most meagre educational demands, in that school there is being made or marred the greatest factor in our national wealth. We have an abiding regard for our Motherland. Here is her primary appeal. This year she makes it with a note so loud that every ear can hear. Here is a field which demands the exercise of interest when interest may not be returned, which calls for steady effort when reward seems long in coming, which asks for resources when there is all too little of them; here is a field which has opened up a special opportunity for every man and woman on whom the University has set its hall-mark. In the enthusiasm of this day, when resolutions are made which will be fulfilled in the commonplace days to come, let your determination be taken that the call to this cause will find you its life-long champion. Then in these days, when they do come, men and women will rise up in their emancipation and self-respect to bless you for a test which your University education has worthily stood, for a challenge which you have truly answered, and for a battle which you have nobly waged.

II

What is the culture of the University to say to the movement ever gathering in

volume which seeks to connect the pursuit of learning with the realm of the practical? Signs of that movement are seen in proposals to provide our University with a new constitution so that its governance may be in the hands of those concerned with the wider activities of life as well as of those whose interests are mainly academic; in the proposals to increase the number of our Universities and to extend the range of their curricula so as to make those who undergo them more effective combatants in the battle of life; and in the proposals to remodel the whole of our secondary education so that each pupil may see a closer connection between the knowledge he acquires and the activity which it is calculated to promote. Here then is a test and a challenge. Are our Universities to become merely technical and commercial schools? Is their usefulness to be judged simply by the industries they stimulate, the professions they fill, the hard cash they enable their graduates to amass? To these questions there can be but one answer. The University exists as a home of culture. What does that answer imply? There are three out of the many implications which must be mentioned here. First, the University trains men and women to think and to take pleasure in thinking. During your college course you have learned to accept facts because they were facts, to think things out for yourselves, to enjoy the attractive if unfamiliar avenues which clear thinking discloses. So it is that when from the calm atmosphere of the University you emerge on the dusty high road of life, you are men and women who can take your bearings, form judgments, avoid prejudices. Second, the University trains men and women to take a wide out-look; it humanises. Thus it

is that when you exchange the experiences of the University for those of life you bring to bear on them a widened sympathy, a mental refinement, an almost intuitive attraction to the things that are excellent. And third, the University through the discipline it affords trains men and women to work. It begets in most of them a habit of work, in many of them a real love of work. Thus it comes about that when you leave your college days behind you, you appear on the stage of life as trained workers.

If your University then has been to you a home of culture in which you have lived, and the spirit of which you have breathed, it has performed this great service for you: it has given you insight not dreams, it has guided you to be a thinker not an empiric, it has made you a worker not a machine. And when the business man realises that this is what the University does, that it sends forth men and women who take long views, who keep their minds open, who get to the roots of things, who can apply to another field the skill which they have acquired in a totally different field, who work because their work is the handmaid of thought, and who think so that their thought is dynamic, he will then be in no doubt as to the value of the culture which a University imparts. And so it will come to pass that men who have never enjoyed the advantages of a University education will be the first to seek to place these advantages within the reach of others. They will deliberately employ the resources at their command for the establishment and equipment of Universities as autonomous bodies freed from financial anxiety and reared in effectiveness until they have their place among the most vital forces in the Presidency. And through this enrichment, the Univer-

sities, by their inherent power to connect the realm of the mind with the realm of the practical, will supply the country with those who can set the problems of the time in the clear light of ordered knowledge, who will stimulate the research which will make industrial development possible, and who will spread the culture which will keep that development free from human exploitation. What is to hinder the University of Madras from becoming the real *alma mater* of a South Indian Jamshedpur?

That our Universities are capable of being at once homes of thought and centres of thoughtful activity there can be no doubt. Within the territorial limits of the University of Madras there are minds to make them such, and resources to keep them such. Will they become such? The answer to this challenge lies in great part with you, the graduates of the University. You have imbibed in part that culture. Nourish it, tend it, scatter it. And in each place where you scatter it there will rise the fair flower of your country's weal.

III

What is the culture of the University to say to the wider relations into which this land, in common with so many other lands, is being brought through the expanding times in which we live? It is not a matter of chance that one of our own graduates, a former Fellow of this University, one who is now a Privy Councillor, should be engaged at this time on a mission from this land to the self-governing Dominions of the Empire with the twofold purpose of strengthening the bonds between this land and these Dominions, and of at the same time strengthening this land for a similar destiny. There is something which is peculiarly congruous in this, for it is of the very essence of a

University that it should assert a catholicity of interest, aim, and purpose which runs far beyond the confines of one's own country and links it with other countries in a community of culture which as it binds uplifts, and which as it enlightens reconciles. Thus it is that a challenge is being sounded out to all graduates not only to unite in reclaiming the millions of this land from ignorance, not only to unite in bringing their culture to bear on the practical fabric of our life, but also to unite in making their culture one of the greatest humanising factors that are at work on the face of the globe. And that challenge you will be able to answer without fear if you have learned the greatest lesson which your University days have taught you. They have taught you to think, they have taught you to work, have they taught you to live? In a recently published biography of Queen Victoria there is an arresting analysis of the character of the Prince Consort. It gives us the picture of one with whom work became an insatiable passion, but to whom at the same time it brought a sense of missing his goal, a sadness and disappointment which impaired his health. Whence came this? It was nourished if not engendered by aloofness; though he was brought into contact with so many and in such honourable fashion his relations with them were characterised by little that was intimate and personal. It is a danger into which every student is prone to fall. You have spent much time over books, you have mastered facts, you have driven the mind along avenues of fairy texture and into realms of remote antiquity. But there is a still greater service that your University course has rendered you. It has brought you into contact with real men and women friends and opponents, those who are loyal to

you and those who at a pinch will leave you in the lurch, those who think deeply and those who think as little as possible, the self-centred and the self-sacrificing, the generous and the jealous, the genial and the morose. For these four years at least you have been in contact not with an artificial world but with the real world in miniature. You have lived, thought and mingled with others, giving and taking, exposing corners and getting them rubbed down, having crude opinions clarified, self-assurance modified, coming to respect opinions even though you cannot accept them, exercising tolerance without sacrificing conviction. You form your opinions but you have had to fight for them, you diminish your suspicion but you strengthen your judgment, you take longer to reach conclusions but they are juster when reached, you can enjoy a joke even at your own expense, you awaken to the amazing amount of goodness and sincerity and worth which there is in the world, and disillusionment and cynicism curl up like a scroll in the presence of men and women before whom you take off the shoes that are on your feet. This is what college life has done in some degree in the past; this is what, unless all reform is to be useless, it is to do in still greater measure in the future. And this is what it has done for you if you have suffered your college days to bring your own separate existence into contact with this fuller life that stretches on every side around you. By this contact you have become the channels of a wider sympathy, a finer tact, a firmer brotherhood, and a larger purpose—channels of a nation's refreshment, enrichment and exaltation.

IV

In such ways as these, then, ladies and gentlemen, you are reminded, by the events

associated with the year of your graduation, of duties which devolve on you, tests which await you, and privileges in store for you. Had I mentioned these only that I might stir you up to fulfil the increasingly greater and more dignified responsibilities which rest upon you as citizens of this land and Empire I should have but helped to recall you to one of the great ends which Universities are pre-eminently fitted to subserve. But I had another thought in my mind; for there is a greater thing than true citizenship, and that is true manhood and true womanhood. All the discipline of a college career, all the inspiration of an academic training, all the refining influences of University life—all these have been playing upon you during these years that in you there might be planted and grown to full fruition (as the days go by), that readiness of sympathy, that quickness of conscience, that firmness of conviction, that largeness of thought, that fulness of self-respect, that nobility of service, which give to womanhood its grace and to manhood its worth.

For though the Giant Ages heave the hill
And break the shore, and evermore
Make and break, and work their will;
Though world on world in myriad myriads roll
Round us, each with different powers,
And other forms of life than ours,
What know we greater than the soul?

And it is because, in the flush of youth
and with the sense of triumph fresh upon
you, you now set forth on the greatest of all
quests for this the greatest of all possessions,
that in the name of the University of Madras
I bid you most heartily God-speed.

IDEALS OF EDUCATION.

"For the glory of the Creator and the relief of man's estate."—*Bacon*.

"**F**ATE is somewhat," says Browning, "but somewhat too is the Power." With greater importance of truth one might say Nature is Education. somewhat, but somewhat too is education. And the somewhat contributed by education to the formation of an individual is as important, or rather more important (because of its being more controllable) than the somewhat contributed by Nature. Two individuals with exactly the same natural endowment can be shaped into two entirely different persons according to the difference in their education. The physical basis of this influence of education is the fact that "at birth the brain is practically an unorganised mass of latent possibilities and that all the connections made later are due almost entirely to the forces of environment and not to the forces of heredity."

Though not understood in its scientific aspect the importance of education was recognised as far back as the emergence of man from sub-human to the human stage. The savage anxiously educated his children in the art of hunting and catching animals. The guilds very carefully educated the children of the guild and jealously kept off outsiders from the blessings and benefits of their education. Even some of the States in ancient times recognised education to be an important instrument for securing national welfare and, as such, made it one of their vital functions. Manu devotes one whole chapter to education and lays down several important educational details. Plato and Aristotle recognise education as one of the important functions of the State. The Mediæval church in Europe thought education to be an import-

ant weapon in their hands for establishing the kingdom of God on earth. Modern States, wrongly believing in the theories of opposition between individual and society and that between Government and society, have been rather too hesitant in recognising the importance of education. Still almost all the advanced Governments have, by now, made education one of their vital concerns. And though some of the backward modern States, believing still in opposition between Government and society to be at the root of social organisation, continue to squander more than half their revenue on the maintenance of army, yet it has generally come to be recognised that "under modern conditions a nation's strength and destiny depend upon its schools."

What direction this influence will take depends upon the ideals that educational institutions adopt and follow.

Influence of Ideals. An ideal is a mental conception of a perfection that an individual or a group of individuals tries to reach. It is not a cold idea exerting no appreciable influence on conduct but it is a profound purpose that influences and determines conduct. Every individual has some ideal or other that guides his conduct and influences his life. From the Utopian philosopher down to the most practical man, all have some ideals which influence and direct their conduct. Man does not live by bread alone. And so it is that even those, who believe that they live by bread, live because they imagine a better state in which they could get more bread and better bread and could get it more easily. Says R. Browning, "Ah! but that a man's reach should exceed his grasp or what is heaven for?" One might with equal truth ask 'What is earth for? What is life for?'

for life is nothing but a struggle for ideals. And so it is said that as a man thinketh so he shall be. Communal and national life too is nothing but a struggle to keep to certain standards. "Ideals," says Mr. Bagley, "are the dominant forces in all the great movements of history." And modern history shows that a nation becomes what its ideals, especially the ideals of its educational institutions, are. So it is that China with its unprogressive schools retains its conservative character, while Japan, keeping before it the attainment of Western standards as its goal has, in two generations, been thoroughly westernised. Again Germany systematically and consistently keeping before it the ideal of commercial and industrial efficiency and national aggressiveness became, in a very short time, commercially and industrially the most efficient, and politically the most aggressive nation in the world. England, on the other hand, maintaining respect for her old traditions, has not shown any such revolutionising change. Again, educated Indians to-day lack in a definite outlook on life mainly because the educational institutions in this country have no definite ideals before them. The system has been borrowed, more or less in its entirety, from England, and introduced here without suiting it either to the ideals that were sought to be attained through it or to the soil of India. So in actual practice there was no definite ideal and this lack of ideals is reflected in its products. In short we might say that the life of every individual and every group of individuals is what their ideals are, for life is nothing but a struggle for ideals, and education, which, in its narrower sense, is one aspect of life, and which, in a wider sense, is co-extensive with life itself, shall be what its ideals are.

Such being the importance of ideals it is interesting to inquire especially in these days of pedagogical unrest and educational reconstruction, what are and what ought to be the ideals of education. If one ask the school-master, who is the educationist *par excellence* what his object is in teaching his boys, his answer will be that he wants the boys to learn some books, and to know and remember some facts and their relationships, and be thus prepared for certain examinations. Learning or more concretely examination success is his ideal. The Pandit has a somewhat similar aim in view. He too teaches some books, and the supreme test of the efficiency of his instruction is his pupils' ability to succeed in *shastrarth* (interpreting the scriptures).

This ideal leads children indirectly to useful race experiences, for, books are the depositories of valuable race experiences. The advantage of its being the most easily and accurately tested has made it attractive to the imagination of school-masters, and the system of holding public examinations for testing the efficiency of education has greatly supported it, for examinations can most accurately and easily measure book-learning. It has dominated and still continues to dominate our educational institutions. It has done some good by its definiteness and by its indirectly leading children to race experiences, but it has also done a lot of harm by its being mistaken for a real and natural aim of education, which it is not, for it has nothing in the nature of man to support it, and by its depriving children of many opportunities of gaining valuable experiences and of personalising impersonal experiences as it fosters a blind worship of books.

Another ideal, somewhat similar to the school-master's ideal, that has dominated and still dominates the educational institutions of England especially, is the ideal of culture. The aristocrat parent wants his child to speak in a certain way, to eat and drink in a certain recognised manner, to dress and dance according to the fashion of his class or community, and to learn certain things which are considered to be accomplishments by his social circle.

There is no doubt that certain ways of behaviour are right and others are wrong, and that it should be the function of education to teach the educand to adopt certain ways of conducting himself and to avoid certain other ways. It is also right that the accomplishments, that the aristocratic parent values, had, and in some cases still have, some element of inherent usefulness in them. But the fallacy of the supporters of this ideal is that they do not test the rightness of their much-valued modes of behaviour, and the value of their highly-prized accomplishments, with reference to the real usefulness of those modes and accomplishments under the changed conditions of society. Its good point is that it keeps us in touch with the past. Its evil is that by its blind worship of crystallized and ossified old forms, it blocks all progress. The culture ideal like the learning ideal is an instance of the worship of the form to the neglect of the spirit.

Leaving the school-masters and the aristocrats if we ask the common man in the street why he sends his children to school, his answer—if he is a thinking individual at all—will be that

he wants to give them a better chance in life, or that he wants to enable them to earn their livelihood more easily and if possible to get more of it than he himself got.

This ideal of education is a perfectly legitimate one. It has been recognised to be such in all times and climes. According to Manu earning of wealth is one of the desirable things of life, and so is also one of the legitimate ends of education. In modern times when physical comfort is considered to be the measure of civilization the bread-and-butter ideal has, naturally, gained greater importance. And so it is that Herbert Spencer advocates the substitution of useful studies in place of the humanities; and so also do the common people cry more and more for technical and useful education in place of formal and disciplinary studies. And so in the school curricula sciences are gradually gaining greater importance and history and languages are being paid less attention to than before. Nor is the change altogether an undesirable one, for surely no system of education should be considered to be sound that does not fit a man to earn his livelihood. The danger of this ideal, however, is that it is apt to make men too narrow-minded, and stick only to immediately useful studies, and thus it tends to stop all further progress of science and, as a result, of the standard of comfort itself. Secondly, leading, as it does, to the neglect of morality and aesthetic culture, it in effect, leads to the diminution of both individual and social pleasure—the very thing that was desired.

All these ideals are objective. Most of the educational theorists on the other hand have set up a subjective ideal. They do not concern themselves with the objective results

that the above mentioned three kinds of med desire, but unlike them, they make the child the centre of their thought. They do not mind how much bread the child will be able to earn after his education, nor, for the matter of that, how much knowledge he will possess; nor do they trouble themselves with the fashion according to which the educated child shall behave. All that they care for is the child itself—the child's faculties. They believe that if the child's faculties are developed all else (objective results) will be added unto him. Harmonious development of all the faculties of the child, they say, is the ideal of Education. They judge therefore of the desirableness or otherwise of studies according as the latter sharpen this faculty or that of the educand. Thus under this scientific education, that has shaken itself free from the shackles of culture and learning, and from the narrowing limits of the bread ideal, Science is to be taught not because it gives the child insight into the workings of nature, and enables him to produce useful results both for himself and others, but because it exercises and sharpens his faculties of observation and reasoning. Similarly Geometry is to be taught not because it is useful in measuring but because it develops the faculty of deduction. In the same way, Geography is to be taught not because it is so much useful information, nor because it is an explanation of the many wonderful phenomena of nature, but because it trains the child's faculty of inferring causes from effects. And much has this view influenced educational work. So it is that teachers are required to lay down, in their notes of lessons, the psychological aim of their lessons. Nor has this influence been without its beneficial effects. It has led to fruitful child-study and

to useful revision of educational methods. Even from the point of view of producing objective results it is not an altogether unjustifiable ideal. The artizan, whose sole object it is to produce certain changes in physical matter, profits much if he devotes some time to the care of his tools. If he wants to cut he must look to his saw. Similarly even the educator, whose sole object is to enable the children to produce certain results, will profit if he devotes some time to the sharpening of the children's instruments—their faculties. Besides it is not right to treat children merely as means for producing certain results. They are ends in themselves.

But the difficulty of this view is soon seen when we consider its actual application. The ideal does not yield any practical guidance for framing our curricula. It ignores the fact that the child is essentially a behaving organism, and that its very safety depends upon its reacting in a certain way upon a particular environment. It also does not take cognisance of the fact that there can be no general sharpening of the faculties to suit all situations. A very accurate mathematician is often found to be a poor reasoner in other matters. Besides it is not desirable to develop all the faculties at all. Moreover the word 'harmonious' does not suggest any thing definite. We must have an ulterior end with reference to which the faculties may be harmoniously developed.

This ulterior end, it is answered, is good moral character. The supremacy of this end is generally admitted. Herbart and his followers have consistently made this the centre of their system of education. And really a good moral character is supremely valuable both for the individual as also for society; for, morality is

the basis of social organization. Kant says "A good will is the only good thing in the world." According to Manu, Dharma (duty) is the foundation of society. This ideal also takes cognisance of the fact that man is essentially a behaving organism. It also yields practical guidance for framing school curricula.

But with the modern sharp distinction between Right and Good the ideal does not seem to be sufficiently comprehensive; for after all, it is doubtful whether the righteous fool or the knowing and intelligent knave is the more harmful person for society. The righteous ignorant man may do a lot of harm both to himself and others through his ignorance.

To avoid this fault of narrowness several philosophers have attempted to put all the ideals of education together in very general formulas, e.g., H. Spencer says that the ideal of education is to prepare the individual for "complete living." Another says that the end of education is the "perfection of our nature." A third one still thinks that it is "inward development," and go on. All these formulas are fairly wide—rather too wide. They are beautifully vague and lack in particular content, and, therefore, can yield no useful guidance for practical educational work.

A more definite and withal comprehensive ideal of education has been proposed by Mr. Bagley in the shape of social efficiency. A socially efficient man is able to pull his own weight and is not a drag on society, he also understands different social institutions and works for social progress, i.e., is moral, and he also possesses the useful part of culture. His faculties are of course well-developed and are in harmony with the

ideal of efficiency; for, without that he cannot be socially efficient.

But efficiency in the West is more or less identical with commercial and industrial efficiency. Emerson, the well-known writer of a series of books on efficiency, has made earning capacity the main test of efficiency. Nor is the efficient man particularly self-sacrificing. Besides that, the social efficiency ideal, even though it were to emphasize the element of service, which it does not particularly do, is still an inadequate educational ideal especially for India, for it ignores the super-social or spiritual environment and destiny of man.

The truth seems to be that all these ideals **All things** in due proportion and combined with and supplemented and dominated by the ideal of spiritual development should be the aim of education. According to Lord Manu, Duty, (righteously earned) Wealth, (legitimate) Pleasure, and Liberation of the soul are four desirables of life, and the attainment of these four, with duty at the base and spiritual liberation as the final goal, should be the true ideal of education.

One more idea, that would not be out of place to mention here, is that, **Determine the natural vocation of children.** while applying the ideals to actual educational work, the especial natural endowment of different children should be taken into consideration. Manu says that the natural profession of the child should be determined before educating him, and especial duties and means of earning a livelihood should be taught him in accordance with his natural vocation. Modern social philosophers, with a curious irony of fate, assert, on the one hand, that differentiation is the soul of evolution, yet deny, on

the other hand, that any such natural differentiation exists in human society; and so they advocate equality for all men. Following them western educationists advocate equal educational opportunity, and the same uniform education for all children. If they allow specialization, they do it at a very late stage, and leave the choice to immature minds. The result is that a good deal of educational endeavour is thus wasted. With the progress of pedagogical anthropology it will be possible to determine the natural vocation of each child before taking it up for education. And then when children are taught duties and means of earning wealth, and are fitted for the enjoyment of aesthetic and other legitimate pleasures, in accordance with their natural vocation, and withal when they are imbued with the spirit of detachment and thus prepared for the final spiritual liberation—then shall education really be a panacea for all human ills.

Lastly we must not forget that for all this **Ideal of sexual purity.** a sound healthy body is essential. Physical exercise and other modern educational aids are good enough for securing this. According to Hindu thinkers, however, control of the feeding and sex instincts is much more important for gaining this end. The very word for student-life in Hindu pedagogics is Brahmacharya, (i.e., sexual control). Serious modern educationists have also begun to recognise the importance of this ideal of sexual control. Says Mr. Bagley: "It is impossible to estimate what proportion of the disease, and the misery of modern life owe their inception to the perverted and abnormal functionings of the sex instinct during youth Education must in some way make for nature's lack of foresight. It can do this in part by replacing ignorance by knowledge.....in part by developing the highest ideals of purity and honour. At best the task is Herculean, but if education fails in this one supreme test, it needs no prophet's vision to perceive that human progress, for which education stands sponsor, will sooner or later end in cul-de-sac."

TIKAMDAS D. GAJRA,

PSYCHOLOGY: THE TEACHER AND THE CHILD.

The end of education.—Education is an art and as such needs to have a clear idea of its end. The 'bread-and-butter' aim to prepare the child for his particular life-career is dull and degrading. The true aim of education is the preparation for a full, energetic and happy life—for social and civic life. Education is to turn a child into a perfectly wise man, good man and cultured man. It is to make the child willing and able to help in the realization of ideal values. The teacher who drills the child so that he may become able to reap pleasures and advantages for the gratification of his personal wishes is nothing but a servant of man; the teacher who educates the child so that he may become a helper towards ideal aims is truly a priest of mankind. The one view humiliates the teacher; the other raises his work to the highest sphere; the one transforms his daily labour into drudgery and monotony; the other into a work of enthusiasm and inspiration. The one makes it marketable service, poorly paid; the other makes it a delight and an honour, which is abundant reward in itself. We are to make two blades of grass grow where only one was growing. We are to dig out treasures yet unknown.

The mere learning is thus raised to a preparation for true culture; the drill is replaced by a preparation for serviceableness; the mere pleasure yields to that true happiness in which all strivings are perfectly harmonized; the cheap desires give way to a true self-development in which the deepest will of man, the will of a self-asserting ideal world, unfolds itself. Education is to make youth willing and able to realize the ideal purposes.

The true teachers, the souls of the pupils, are like beautiful marble from which they have to shape ideal forms. With love and sympathy they forget themselves and live for those children whose happy souls have been intrusted to their devoted work, and in every lesson, every word, and every glance they express that enthusiasm for the ideal which gives meaning to their difficult mission. Education should lead to the work of self-education.

How Psychology illumines educational work.—Psychology is a scientific account of our mental processes. The temperament varies with different persons at different ages. The child is naturally sanguine, the youth melancholic, the mature man choleric, and the old man phlegmatic. The motor temperament generally produces the impression of greater brightness and the sensory pupil suffers by comparison. Psychology is indeed to be wedded to Ethics in driving home to us the idea of our goal—of all that is comprised in a completely developed mind. But it is needed still more in understanding our starting point, the child, on whose rudimentary impulses and aptitudes our educational work has to act. It is needed further for any clear thinking out of the processes of teaching. A shrewd American writer says: "While the pupil thinks the object under consideration, the teacher thinks the pupil's process of thinking the object." So, this calls for a thorough knowledge of Psychology but for which success in teaching is not to be had. Even in such a common thing as the teaching of Reading we cannot do without the applications of psychological principles. The old-fashioned Alphabetic Method has been replaced by the daring empiricism of the "Look-and-Say" Method.

The teacher is a worker in mind as a blacksmith is a worker in metal, and mind must be moulded by mind. Thus an adequate grasp of Psychology delivers us from the old unscientific view of our work as a kind of mechanical action. Psychology is not a set of definite prescriptions such as one might find in a cookery book. In these days there is no excuse for forgetting that a child is a living organism which grows by the exercise of its own functional activity and that the work of the educator is to excite and to direct this activity in the way most favourable to a sound and complete development of mind. Education is a branch of the great science and art of farming or "growth-craft." What does the gardener do? He does not *grow* the plant. It grows *of itself*. The gardener only prepares the land for it; manures the soil to add to its fertility; keeps it in a healthy atmosphere, feeding it with water, air and light. But the tiny seed sprouts into life, shoots up tendrils into the air of itself. The vitality of growth is its inherent power. It will be extremely unwise for the gardener to try to pull up the ends of a creeper to a greater height than its inborn energy can throw it up, before its appointed time. Similarly it is foolish on our part to stuff the minds of young learners with materials sufficient for merely passing an examination. Stores of information about things do not constitute true knowledge. Knowledge is a power, not a possession. It is like the merchant's capital rather than the miser's heap of gold: the one invested in commerce and industry is a source of increase and a centre of activity; the other hoarded in secret places is powerless for good. It is dynamic, not static.

Why the teacher should study Psychology.—Thus, teaching can never be carried on by machinery. It ought to be the teacher's glory that it is impossible to lay down hard-and-fast rules that apply in all cases without calling for any thought on his part. No teacher would have taught differently if thinking had been carried on in the liver instead of the brain. There are yet hundreds of psychological facts that no honest teacher can afford to neglect, and there is a school attitude towards psychology that is thoroughly wholesome, and without which the teacher cannot do his best work. Prof. Cattell very aptly says: "Psychology has much the same relation to the profession of the teacher as physiology has to medicine." You cannot, however, deduce definite programmes and schemes and methods of teaching for immediate school-room use from psychology. Psychology is a science and teaching is an art; and sciences never generate arts directly out of themselves. The science of logic never made a man reason rightly and the science of ethics never made a man behave rightly. Sciences help us to catch ourselves up and check ourselves. A science only lays down lines within which the rules of the art must fall, laws which the follower of the art must not transgress. "The omega of psychology is but the alpha of pedagogy." We must also bear in mind that the pedagogics and the psychology are congruent, but neither is subordinate. The teaching must agree with the psychology. To know psychology is, however, absolutely no guarantee that we shall be good teachers. Psychological principles are negative rather than positive. Psychology is not, therefore, all that is needed by the teacher. We require a happy tact, sympathy, ingenuity, a strongly suggestive

personality as well as much practical knowledge to tell us what definite things to say and do when the pupil is before us. Psychology gives a theoretic view of the mind *as a whole*, in its connected phases and stages of development. The ethical end itself viewed as realisable by the individual's efforts of will, comes into psychology, appearing in its complementary form, as the motive to action. It is only the clear steady vision of our end which can make us apply psychology in such a way as to become true educators. Even if the teacher is concerned only with the processes of acquiring and reproducing knowledge, he will find he must study more than the intellectual side of his pupil's mind, since feeling in the shape of interest, and will in the shape of an effort to think, both enter into the processes of learning. Education to-day is much more than teaching. It is an orderly development of all the powers of the mind.

The advantages of psychology for the teachers.—Psychology helps to give the teacher knowledge of his field. His field is consciousness, a developing self-consciousness, and his work is to set this consciousness a-rolling in the right path. From the psychologist alone runs the information concerning the nature of the field. The teacher, required to mould the intellect, cultivate the feelings and shape the moral and religious nature of pupils, can do it better with a mature knowledge of what these things may be, than without it. There are five things in particular that will show how psychology helps in giving the knowledge: (1) The foundations of the curriculum; (2) The stages of mental development; (3) Individual differences; (4) Special topics, such as fatigue, the inheritance of mental traits, the health of children

in the different periods of their development, the fears of children, etc.; and (5) Laws of Mind, such as, the laws of memory and association; the way a habit is formed; the kinds of imagination; how to reach a feeling; the indirect way of forming the will; and the countless other things.

Secondly, psychology helps to give the teacher the power that comes from such knowledge. Psychology describes how the mind learns, it is the business of teaching to cause the mind to learn; psychology describes how the mind appreciates beauty, it is the business of teaching to cause the mind to appreciate beauty; psychology describes how characters are formed, it is the business of teaching to assist in the formation of character; psychology describes the nature of the religious sense, it is the business of teaching to stimulate the religious sense. The laws of mind furnish the principles of educating. Psychology gives native tact and skill their best opportunity. A teacher is sometimes said to be born, not made. But, does not a scientific insight into the technics of his art help to make him?

There are certain personal gains also. (1) 'Truth for truth's sake' is a good attitude. A teacher may become a master of mind for its own sake. (2) Psychology develops an analytic power in dealing with mental material of immense service in the work of clear teaching. (3) Psychology aids the teacher in rationalizing his experience. Through psychology the teacher's work will continually have a diagnosis of pupils in the background and the teacher himself will increasingly become an expert physician of the mind. (4) Through psychology every teacher is to some extent his own educational critic. (5) Psychology saves us from mistakes,

narrowing the path for experiments on children. (6) We gain confidence in respect to any method we use, believing that it has theory as well as practice at its back. (7) It fructifies our independence. (8) It re-animates our interest.

Examples.—The examples of Laura Bridgman and Helen Keller prove how experimental psychology works miracles in the field of education. Laura Bridgman (1829-1889) was an American blind deaf-mute lady. At two, scarlet fever robbed her of sight and hearing, blunted her sense of smell, and left her system a wreck. Dr. Howe of the Perkins Institution for the Blind at Boston trained her up. She was limited in her communication with others to the narrower uses of touch,— patting her head meant approval, rubbing her hand disapproval, pushing one way meant to go, drawing another to come. She learnt the alphabet by touch. She learnt words before the individual letters. Dr. Howe's first experiment consisted in pasting upon several common articles, such as keys, spoons, etc., little paper labels with the names of the

articles printed in raised letters which he got her to feel and differentiate. Then he gave her the same labels by themselves, which she learnt to associate with the articles they referred to, until, with the spoon or knife alone before her she could find the right label for each from a mixed heap. The next stage was to give her the component letters and teach her to combine them in the words she knew, and gradually in this way she learnt all the alphabet and the ten digits, etc. The whole process depended on her having a human intelligence which only required stimulation from a teacher well-grounded in child-psychology. Gradually she grew up in knowledge a gay, cheerful girl, loving, optimistic. Her name has become familiar everywhere as an example of the education of a blind deaf-mute, leading to even greater results in Helen Keller. It is superfluous to multiply instances. Such examples should not lack imitators. To teach Krishna Sanskrit, we must know not only Sanskrit, but also Krishna.

SASADHAR BANERJI.

A Manual of Arithmetic

By the late MR. S. RADHAKRISHNA AIYAR, B.A.,

Principal, Maharajah's College, Pudukotah.

Approved as a Text-book for all Classes and Forms.

Vide Fort St. George Gazette, 24th Jan. 1907.

Very useful for School-Leaving Certificate Examination

12th Edition (1921).—Price Rs. 2.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

THE MESSAGE OF THE BOLPUR SCHOOL.

THE Modern Schools in India have to learn many a lesson from Sir Rabindranath's School at Bolpur. Whatever the virtues of modern education may have been, the defects often pointed out, have been that the 'higher' education in India has not been related to the problem of national efficiency, has made no attempts at embodying national ideals, has not emphasised individuality in education, assuming, as it has done, the sameness of the needs and abilities of thirty or forty pupils in a class-room. These, to a certain extent, have been sought to be remedied by the Bolpur School.

Sir Rabindranath thinks that the schools at present in India are all imitations of the schools in the West. Besides the fact that India has taken over the English word 'University,'—which often suggests the pictures of Oxford and Cambridge, as if India's salvation lay in purple patches copied from them—the features of the West that have often attracted attention, have been the buildings, furniture, regulations and syllabuses rather than the main spirit of their society, literature and the manifold activities of an abundant corporate life. Condemning the mere imitative spirit, the mere external characteristics attracting the Indian fancy, Sir Rabindranath asserts that, that education is true which recognises 'mind' to be a living organism—often not carried out in actual practice in our schools though the theory has won some recognition—and consistently with this theory, has stimulated in his school the spontaneous expression of each lad's spirit in song and poem. The poet often evinces great interest in the boys' productions and suggests lines of improvement.

"Modern Education in India has seemed to Rabindranath like a carriage to a horse, the dragging of which merely serves to provide it with food and shelter in the stable of its master." What Tagore aims at is that Indian education has been utilitarian and that it has resulted in imitation rather than creation. It is doubtful whether Indian education has been sufficiently utilitarian, as some people would have it. It has been utilitarian in this sense, namely, that it has fitted some people to become clerks in the Government service, when the Government was in need of English-knowing people to assist in the business of governing India. Beyond that, none can vouchsafe that it has either contributed to national efficiency or has trained the masses for citizenship. We can agree, however, with Sir Rabindranath when he remarks that Indian education has resulted in imitation rather than creation. This has been rather due to the fact that the Indian students have been obliged to learn through the medium of English. English is taught as a second language by the direct method in the Bolpur School and the students are educated in the knowledge-subjects mostly in the vernacular. A move in this direction is being made in the several Presidencies in India, and it is hoped that the experiments will prove successful.

In the Bolpur School, Nature is one of the great teachers. Tagore feels that it is India's mission 'to realise the truth of the human soul in the Supreme Soul through its union with the soul of the world,' as is evident from the following:—"In a little flower there is a living power hidden in beauty, which is more potent than a Maxim-gun. I believe that in the bird's notes Nature expresses herself with a force which is greater than that revealed in

the deafening roar of the cannonade. I believe that there is an ideal hovering over the earth—an ideal of that Paradise which is not the mere outcome of imagination, but the ultimate reality towards which all things are moving. I believe that this vision of Paradise is to be seen in the sunlight, and the green of the earth, in the flowing streams, in the beauty of the spring-time and the repose of a winter-morning. Everywhere in this earth the spirit of Paradise is awake and sending forth its voice. We are deaf to its call; we forget it; but the voice of eternity wells up like a mighty organ and touches the inner core of our being with its music." Classes are held under the shade of trees or in the open verandahs, under the spell of the belief that open-air regime is conducive to the physical as well as the mental development of pupils. The students live and move and have their being in an atmosphere of love for nature and sympathy for all living things. Besides the fact, that open-air life is likely to be productive of good results from the physical and mental stand-points, this aspect of the Bolpur School may be deemed to be of special interest for the schools at the present day. Bearing in mind the necessary curtailment of all extravagant expenditure as part of the Government's retrenchment programme, and simplicity as an essential element in all true Indian education, discarding the English emphasis on culture through architecture, would not our schools be so well-advised as not to make a fetish of grand buildings and extravagant furniture?

Bank of all education, imparted in the school at Bolpur, is the dominant ideal that the most formative influence in the school is the rich personality of the Guru. His personal association and example

have always been reckoned in India among the prime factors in the education of the pupils. It is a matter of common knowledge that the Local Governments in India have of late recognised the value of moral and religious instruction in schools and have yielded to the pressure of their pressing demands for their inclusion in the school curriculum. It must be borne in mind that the aim will be achieved completely only when provision is made for constant association and communion between the master and his pupils. Perhaps the most impressive in the Bolpur School to those interested in religious education, are the morning and evening meditations.

In addition to the above, there are some important features of practical interest which may well be incorporated in the present-day schools in India. The first among them is that there is no permanent Headmaster, while the control of the school is vested in a council of masters, one of whom is annually elected to be the executive head and to be responsible for its management. To this staff, Tagore himself often yields without demur. This is a lesson to be studied well by some Headmasters in the Presidency, who often under false and fanciful notions of dignity and honour, do not consult their Assistants on important matters where such consultation would be not only profitable but also prove healthy as conducive to the harmonious working of the school. Such a system would also reduce the heart-burning of the Assistants to a vanishing quantity. A second feature is that the discipline in the Bolpur School is mostly in the hands of boys. To a considerable extent, the pupils frame their own rules, choose their own judges and all minor offences are tried by boys' courts. Corporal

punishment has no place in the scheme. Often the penalty may be in the nature of ostracism, being obliged to eat apart, to stay outside the class or to refrain from talking with other boys. This system makes for self-discipline among the youths and for the creation of a body of public opinion, the fear of whose odium acts as a greater deterrent on the boys than any punishment from any external source. Thirdly, the Bolpur boys acquit themselves rather very creditably in social work. Distributing medicine in times of epidemic, rendering organized service during occasional fires, and conducting night-schools are among the various avenues of social service in which the lads of the Bolpur institution have won unique renown. This is well worth emulation by the students in other parts in India.

A. S. VENKATARAMAN.

TALISMANS AND CHARMS

For those People to Avoid all Sorts of Misfortunes and Enter the Gates of Successful Life.

	Rs.
For Honour, Riches, Learning and Greatness	7-8
For Health, Physical Strength, &c.	7-0
For Power of Eloquence, Speeches, &c.	7-8
For Success in any Undertaking or Litigation, &c.	10-8
For Success in Sport, Racing, Cards, Games of Chance, &c.	7-8
For Success in Trade, and Business	100
For Men's Love to Women	7-0
For Women's Love to Men	10-8
For Love of Opposite Sex, attractive power	7-8
For Agricultural Prosperity, Farming, Good Crops, etc.	7-8
For Success in Mining Plumbago, &c.	100-0
Rabbi Solomon's Special Talisman for every success. Specially valued and worn by every successful	15-0
Hebrew, 2nd quality	21-0
1st quality	30-0

NOTE.—A Money Order will bring the Talisman to your door. Always the full amount should be paid in advance. No V. P. P.

Extensive Life Readings ... Rs. 15.

D. A. RAM DUTH,

ASTROLOGER,

No. 20, (E.R.) Choku Street,
COLOMBO (CEYLON.)

REMODELLING OF THE SECONDARY EDUCATION IN VIEW OF MODERN LIFE.

THAT the Secondary Education as at present imparted here fails to fulfil certain essential conditions and requires remodelling is accepted on all hands. It is a purely cultural type of education affording work to the brain alone. The knowledge of the pupils is absolutely bookish. They have little practical knowledge and do not know how to apply what they learn from books. They have been robbed of expression since the education is given in a foreign language which is not a little difficult to acquire. In view of promoting efficiency in English their vernaculars are neglected. Hence expression in their own vernaculars has also become very poor. The curriculum itself is overburdened and the health of the students is shattered before they pass the S.S.L.C. examination. These are some of the pressing evils that clamour for reform.

Besides the abovementioned defects there is yet another which it is equally urgent to remedy. The present education forgets the utilitarian aspect. The ambition of the parent in educating his son is to make him earn. But this ambition of the parent is in almost all cases wrongly directed. He thinks of some Government service and his highest hope is to see his son employed as a clerk in some office drawing some thirty-five rupees. That this is a poor ambition need not be said and not rarely is the son also nursed in that ambition. Our point here is not whether the ambition of the parent is low or high but that the parent sets a utilitarian value upon the education of his son. He wants him to earn. We shall see whether this education

enables the pupil to earn. Without any discussion we may say that this education trains them to be clerks or to become teachers. But now there is a plethora of clerks and the Government has launched on a policy of retrenchment. Further there is the question of caste which influences not a little admission into Government offices. To get entry into the teacher's profession is also difficult. Thus our S. S. L. C. holders are reduced to a helpless condition. And what an investment has been made to come to this unenviable condition! The whole property of the family (oftentimes a big family with a little property) is staked. What ruin befalls the family!

What influence has this education upon the character of the pupils? It is a lop-sided education and develops only the mind (only memorising even here) giving little or no work to the hand. It creates no self-confidence in the pupils; it does not make them conscious of their powers; it infuses no high ideal. Only a very low ambition sets in.

If the Secondary Education should develop an all-round capacity in the pupils, if it should fulfil the utilitarian aspect of education, if it should elevate the character of the pupils by making them self-conscious and self-reliant, the power of the hand should be co-ordinated to the power of the brain. Provision should be made for the study of and training in vocational subjects.

The term 'vocational subjects' is loosely used to mean different things. To some it means 'Manual Training' by which it is meant to develop an all-round capacity in the pupils. To some others it means 'Industrial Training' by which it is meant to make an individual depend upon the work of his hand

for his livelihood, to make him work in any industry. Both these 'Manual Training' and 'Industrial Training' should find a place in the Secondary Education. In these days of collaboration of Universities and cities, of Universities widely expanding so as to include all kinds of subjects, of education being taken into the workshop it is not too much to aspire to the inclusion of industrial education in the Secondary Education.

How to incorporate this with the Secondary Education? As in many European countries there should be ramifications of industrial education after a certain standard of general culture has been attained. During this initial period the pupils may be given cultural education as well as manual training. At the end of this period those who want to specialise in any particular trade may go in for it while others who want to go up for cultural education may do so. This will not only save further expenditure on the part of the parent in cultural education but will also enable the pupils to earn after a period of training and thereby satisfy the monetary need of the family. In India where the combined family system exists there is every need that each member should be able to earn. Drones in the family cannot be allowed to live upon the earnings of the industrious. If industrial education is included in the Secondary Education it will give better incentive to the parent to send his son up for such an education. As an additional incentive to the parent to train up his son in an industry and to lessen the demand on his purse the rate of fees for industrial training should be nominal. Such students as acquire proficiency and become well-skilled in a trade while they are still under training may be given work in the school and paid for it.

Thus the school may be a workshop and at once an educating institution.

The question of putting a heavy burden upon schools must also be considered. It may not be possible to open at once in a school many branches of industrial education. In such cases the school or schools may open classes in particular trades of the locality or in some of them at least. The Government must co-operate with schools and afford all possible help in the matter of opening such industrial classes. A large outlay will be needed at the outset and the public also should come readily forward to aid this laudable project of giving industrial education.

In this programme of including industrial education in the Secondary course we cannot afford to neglect agricultural areas where agricultural education is necessary. In the present day it is the fashion to set up High Schools only in towns. But what havoc it causes is rarely gauged. Villages are depopulated as a result of it and rural industries are abandoned. Agriculture which is the very prop of life suffers enormously. India is essentially a country of villages and her prosperity, one may boldly say, is bound up with her village life. Villages are her suppliers of food and any harm done to them is sure to spell ruin to India. However much we may feel the need to develop industry in India, whatever be the prospect of raising India to a height of industry we cannot forget that her welfare is fast linked to her advance in agriculture, to improved cultivation, and employment of better methods and implements. Her future in agriculture is as great as her future in industry. Agriculture in India remains still unexplored. Therefore the creation of High Schools in rural areas and the imparting of agricultural education in them would be of immense benefit. Such schools while they offer scope for cultural education may also develop agricultural knowledge. Mr. C. R. Reddy, the great educationist in South India, rang the true note when he said in his speech on the occasion of opening the B.A. classes in the Meenakshi College at Chidambaram that 'to democratise education it should be industrialised'. But

in the same speech he overworked somewhat when he answered to the objection that the spread of education as at present by creation of schools in towns is detrimental to village life. "Self-expression, that hackneyed phrase," said he, "is here as elsewhere, the only just principle. The desire to promote contentment by perpetuating ignorance is immoral." This is surely hitting beyond the mark. When we plead for not depopulating villages we do not mean to keep the people there in ignorance and tie them to the soil. On the other hand we only urge that such measures should be adopted as would enable the people in villages to attain to a degree of education and also at the same time to save villages from depopulation and to keep rural industries from being ruined. In the schools to be established in villages literary education may go hand in hand with agricultural education. The way to higher education is ever open to those that aspire and that have the means to go up to it. No slavery is implied here, no perpetuating of ignorance.

In conclusion, we may take example from foreign Universities which are ever expanding and which under their broad wings bring every department of life and do well to provide for industrial training in our Secondary Education. Development of industry is a deep felt need here, the unemployment question is becoming more and more keen, the desire for a well-balanced education is great and the provision for industrial training in the Secondary Education will do a good deal to satisfy these. The benefit to the individual as well as to the nation by the incorporation of industrial courses in the present education is very great. The present miserable condition of India is due to the lack of development of industry and if the country should rise higher, industrial advance is highly in order and very congruent. At the same time it is not forgotten how India will become crippled if her agriculture is neglected.

V. VIRARAGHAVA AIYENGAR.

LITERATURE—OLD AND NEW

[Translated from the Bengali original of the late
PROF. AJIT KUMAR CHAKROBARTI.]

BY

MR. L. V. RAMASWAMI AIYAR, B.A., B.L.,
Chief Court Vakil, Trichur (Cochin State).

IN Europe the days of the popularity of ancient literature,—the days when such literature was read with avidity,—have come to a close. Not to speak of Shelley, Keats and Goethe, even writers like Tennyson and Victor Hugo have become out of vogue and old-fashioned. At the present day, into the assembly of literary magnates, these are not called, but youngsters with raw, green pipes have monopolised to themselves all seats therein. On the necks of these youngsters fall garlands of glory and in their praise rise ecstatic pæns of joy. Even like the bodies of many a beautiful ancient queen concealed amidst the hard rocky layers of the Egyptian pyramids, even so poets and writers with an ancient reputation have been to-day buried in the limbo of oblivion, however perfect and beautiful their works might be.

And gradually their very claim to fame—the existence of inordinate beauty in their works—is itself being questioned. The modern man does not fail to find objections to recognising Shakespeare's works as the best of their kind, or Raphael's pictures as incomparable. At the present day, men have set up the standard of revolt against the practice of deifying these time-honoured idols with flower-garlands and incense-lights.

It can scarcely be said this feeling of revolt is reprehensible or contemptible; for, this is only a phase of that great modern revolt or uprising directed against all bonds and narrow conventions. So far as the world of

matter concerned, modern science has generated many a whirlpool in the still, silent pool of ancient beliefs. The old notion that all matter is perceptible to the senses has been proved to be a colossal mistake. In the region of the mind also, as a result of modern psychological researches, old ideas have gradually begun to give way. For instance, it has been found that all our thoughts and reflections are not wholly the accomplishment of the mind or intellect, but that the part played by the world of "indefinite consciousness" or 'Avyaktachetana' is neither small nor insignificant.

When thus both within and without the mind of man, old ideas are being cast off, it is only to be expected that in society also, at the present day, the old Sanatanaic principles are no more able to exercise their ancient power and charm. Gradual rumblings and shakings, portentous of a great earthquake, have begun to be heard in the midst of our society. There is for instance the great feminine movement. We have been hitherto believing that the position of women in society has been permanently fixed, and their functions definitely prescribed from time immemorial, but the modern woman refuses to consent to any such fixed arrangement. She refuses to accept the old principle that the sphere of women's activities is within the house, while that of man is outside, that in fact 'cooking, church and children' (küche, kirche, kinder) should alone concern her. On the contrary, she boldly claims to share the duties of the outer world equally with man, and wishes to bring to bear her influence upon, and create a new world of thought in, the several departments of art, literature, society and politics. Whichever modern literary work we may open, we do not fail to

find therein the glorification of the notes of this grand uprising. The rocks building up that ancient time-strengthened edifice of society are being gradually crushed asunder by the knocks inflicted by the works of writers like Ibsen, Hauptmann, Bernard Shaw and H. G. Wells.

Such a violent devastating tempest of the human mind has never arisen hitherto in literature,—no, not even in the fateful times of the French Revolution.

This feeling of revolt has of necessity extended itself to the department of literary ideals and tastes also; for he who wants today to find delight in ancient literature, will necessarily have to cease to breathe the atmosphere of modern times. In other words, it will be necessary for him to become ancient in every respect, his very cast of mind should become old and his inner vision should become dimmed and feeble. In the midst of the splendid feast of youth, such an one could hardly find a place.

In our own land it cannot be said that the South Wind of Youth has not begun to blow. But we are a very ancient race, all our acts, ceremonies and customs are founded on the authority of no less a person than ancient Manu himself. These are permanent and Sanatanaic! Him who is our God of Innovation, we have made him drunk with Bhang and Dhatura, and lulled him to sleep.

With the oncoming of English education and its invigorating influence, a stray wave of the French Revolution had somehow crossed the oceans and approached the closed-up ghat of our ancient society. One poet alone was sailing his boat outside the confines of this narrow region, when this stray

wave met and influenced him. That poet was Michael Madhusudhan Dutt. Enlivened by the effect of this new feeling, this poet in his "Meghnadbodh" and "Virangana" attacked vigorously our old conventional ideas and set up new models of his own.

But the gurgle of this weak, spent-up wave could hardly induce any the slightest influence within the closed-up 'ghat' of our society. The spirit of Michael Madhusudhan's dramas never penetrated the region of our literature. Like a beautiful image, Michael's work which had been fashioned after foreign models remained but an object of beauty. Not a devotee was there to light his lamp from Michael's light which itself had been lit from the lights of the great feast of the French Revolution. Michael's light burned alone and apart.

Then came, on the one side, Bankim Chandra Chatterji and, on the other, Hemchandra and Nobinchandra who built a grand golden temple within the narrow closed-up 'ghat' of our society. In tiaras of bright and brilliant gold, our religion, ancient conventions, customs, history and ancient ideals were glorified herein. Sanatanaic India with all its ancient conventions and in all its time-honoured glory received its beatification within this golden temple.

But was this Western wave so easily to be quieted? The floods that had burst asunder the bonds of the West, had sent forth in all directions many a mighty rising wave. The shock of one of these waves has again been felt in our land at the present time. Now, however, the response has not been entirely feeble. The general spirit of revolt has affected literature too.

But we fear to accept this new literature of revolt; we move about within that stately,

golden mansion of conventional literature built by the master-hands of Bankim, Hem and Nobin, and walk round its courtyards and terraces, never venturing to peep outside. Those among us who are intellectually great are devising means as to how the walls of the narrow ghat of our society could be made harder and harder still. The real earthquake has not yet begun to be felt in our society; the few light winds that have already blown, have only been able to pull asunder a roof or two here and there, so much so that whenever a revolutionary idea appears in literature we derisively dismiss it with the remark, "O! it is of no consequence!"

Nevertheless, it would be idle to pretend that the new spirit has not produced in us some fear. A book like 'Gora' or 'Ghare Baire' and another like 'Achalayatan' [all these works are from the pen of Rabindranath; of these, 'Ghare Baire' alone has been translated into English as "The Home and the World."—TR.] have been enough to cause a feeling of uneasiness, if not of positive agitation, in our midst. Fools that we are, we are anxious to put out the spark of revolt that glimmers in distant corners but alas! the spark gradually breaks out into a fire and spreads itself far and wide. If only we had our Ibsens, our Bernard Shaws, our Maeterlincks, then not one of our ancient time-revered edifices of society would remain intact. Let us from henceforth at least, feel that there can be no putting out this fire; for this is the very fire of life and can never be extinguished.

It has been asked by some in a doubtful mood what the result of this revolutionary spirit will be, if it takes root in India. If this new uprising sweeps away all conventions, customary ideas, rituals and religion, would

it be able to construct and develop fresh things in the stead of the old? Why, your Maeterlinck, your Bernard Shaw and your Ibsen have no constructive programme at all, but are full of negative theories and ideas!

Well, when this earth was being created by the Almighty, what wild snow-floods, what terrible outbursts of flame, what mighty earthquakes had agitated the ethereal space! If at that time when mighty lands and unfathomable seas were being formed, somebody had asked the All-powerful Creator: "What would the result of all this terrific change be?" what answer would the Almighty have given? He would merely have smiled and remarked, "There is no use in knowing it now, see it for yourself! The result could not but make for everlasting good!"

Why do we so much place reliance upon artificialities in preference to the normal workings of Nature? When we believe that what man has once created would and ought to make for the permanent good of mankind for all time, then surely we thereby overlook the importance of the workings of Nature. We fail to realise that this modern feeling of revolt in our society is the outcome of natural tendencies and that it would be a vain task to put down the same.

What is genius? It is that intellectual power which ever and anon acquires and puts forth fresh energy. That power which only makes the mind grow old into utter senility, enfeebles the inner vision and shortens the mind's power of expansion and activity, does not deserve the name of genius. Hence it is that unfading youth, uninterrupted freshness, is the supreme characteristic of genius.

In all literatures where genius sprouts out, the kingdom of Youth ever exercises supreme sway. This spirit of Youth makes new ex-

periments, causes revolutions, makes wars and achieves triumphs. Let men, old and hoary with ancient learning, rail ever so much against this youthful spirit, but we make bold to say that if in any society the current of this fresh youthfulness meets with obstacles in its onward course, then undoubtedly that society will soon rust itself out, and seeds of destruction will have been sown.

In our land, old men have been ruling our society for a long time, and as a result, the study of the science of reasoning has attained a wonderful development. But alas! we forget that if we entrust the responsibility of ruling a vast society in the hands of speculative philosophy, then that society would sooner or later be converted into a mad-house! The period of theoretical reasoning is ever followed by the period of artificialities and cobweb subtleties. The Sophists in Greece and the "Naiyayikeras" in Bengal are instances in point. But human nature never stands such nonsense for long. To seek relief from such cobweb subtleties, man indulges riotously in lightness and frivolity,—i.e., the pendulum swings from one extreme end to the other. In Bengal, for instance, by the side of the speculative subtleties of the "Naiyayikeras," we possessed Panchali, Vidyasundar's songs and many other light and frivolous works. Just as the plays of Aristophanes had, in Greece, once risen more prominent than any other writer of the time, even so at one time the light literature of Bengal enjoyed extreme popularity. And what has been the result? Neither true philosophy nor literature proper was produced, but simply a mass of wasted labour.

Of course we have not forgotten the existence of the Vaishnava literature in Bengal, which is the only Romantic literature of

Bengal. Owing to inherent causes, however, even this Vaishnava literature, after a time of extreme popularity, was found to have finished its task.

Then came the long exile,—the time of Panchali, of artificialities and speculative hair-splitting. Where was life, where was song, where was that joyous burst of life's unfading enthusiasm?

After that long exile, the notes of the trumpets of Youth have once again sounded in our land. We have now to burst through all walls of ancient conventions and time-honoured beliefs, and get into the broad, open royal road of the world. Let, then, the light of the sun fall upon those literary pilgrims who with an unfading spirit of enthusiasm cheering them onward, venture into fields yet unexplored and new! Let splendour ever reign in perfection on their victory-flushed brows!

THE SCHOOL ARITHMETIC

BEING SOLUTIONS OF THE QUESTION PAPERS SET FOR THE LOWER SECONDARY EXAMINATION FOR THE YEARS 1880 TO 1904

CHIEFLY INTENDED FOR THE USE OF PUPILS
OF THE 1ST, 2ND, & 3RD FORMS

BY

H. CHENNAKESAVA AIYANGAR.

Price—8 As.

SRINIVASA VARADACHARI & Co., MADRAS.

A PLEA FOR VOCATIONAL TRAINING

BY

F. A. C. REBELLO, B. A.

ONE of the many things which agitate the Indian mind at present is the inadequacy of the educational system followed in the country to meet the real needs of the population. Without troubling ourselves about the question in general we may be excused for taking a survey of the position as it affects our district and our people.

We have a College for boys and another for girls. We have High Schools and a considerable number of Primary Schools. In the matter of literary education we may therefore be said to be fairly well provided though as regards primary education we have yet to do a great deal more.

If we regard the education of our youth as a means to an end—and that end the earning of their livelihood—our educational system is one-sided. It is not enough to read and write and discuss politics. Our sons and daughters have to earn more, and therefore to learn more than what our schools train them for at present.

By far the larger number of our people are employed in agriculture, a few in industries, a smaller number in trade, and the provision for training in these subjects is not worth speaking about. Our boys and girls tend day by day to be estranged from their original occupations, and are practically forced to find in foreign lands their daily bread which they cannot and will not earn in the homeland. The practical result of our High Schools is a wholesale exportation of the best of our youth, leaving the less adventurous and less capable at home, to look after the straggling pieces of

XXVIII—71

land which our people possess. In the meantime the cost of living is increasing in all directions and in many cases it is difficult to make both ends meet without the aid of earnings got from other lands.

It is not my object to discourage emigration. If all of us stay at home we shall be in stagnant waters, rotting and decaying while our neighbours are progressing. The well-being of the people at home as well as the better fitting of those who go out requires that they should be properly trained for the occupations which they are intended to take up. Not that there is not enough work for us to do; we have plenty of lands in the district and in our neighbouring territories which await the hand of the cultivator; we have plenty of improvements to make in our methods, but no schools where these improvements can be taught to the young.

Very few of the parents who send their children to school have any exact idea of what their children should do or are fit for. The one thing they have in mind is that they should get a good job after passing. Their ideas of honourable and gentlemanly work do not march with the times. The more our boys take to literary education, the less they become fit for the home occupations and the less inclined for manual work. A farmer's son going to a High School thinks that he is destined for a higher sphere and looks down upon the occupation which supported his ancestors. Most of the young men have in their mind a clerk's job in Bombay and even for that they do not receive adequate training.

The first desideratum in our educational system is a clear idea in the minds of the parents of what they expect their children to do and what their capabilities are. The next thing is to shape the course of the young to

the occupations or professions which they are likely to take up. In considering these there are many obvious limitations due to means, intelligence, provision for dependents, and the degree of training required. It is not possible to provide high professional colleges in the district nor would it be desirable to seek training in industries for which the district does not furnish raw material. But within these limitations it is necessary that we should provide the necessary professional training.

Taking agriculture, the most important occupation of our people, it is not creditable to us that we have not provided an agricultural school in the district, and that in spite of fairly large landed interests in and out of the district, we have sent not even half a dozen of our young men for agricultural training in the colleges at Coimbatore and Bombay. The fertility of our lands, the certainty and regularity of rainfall, the luxuriance of our vegetation, the plentiful supply of water in the dry season and the extreme intelligence of our people should have made Kanara the garden of India. The neglect of our cocoanut gardens, either in respect of proper nurseries, proper manure and attention to the capabilities of the soil is mostly due to the want of agricultural training. So also are the numerous defects in the cultivation of paddy, sugar-cane and food grains. We have plenty of lands suitable for fruits and yet they are lying waste because our people can think of no other cultivation than that of cocoanut and paddy. Our farm animals are entirely neglected and starved either because we do not know how to take care of them or because we do not know that we can easily grow fodder crops more nourishing than the dry straw on which we feed them. Many of

our people are fond of fowls and eggs but how many do really know how to rear poultry? With a wealth of grazing lands seldom equalled we have none but weakly animals, because no attention has been paid to breeding as a profession. Only agricultural education can remove these defects and this education has to be imparted to the young before they acquire a disgust for such occupations. Agricultural schools are required in such centres as Bantwal, Kirem, Sirvam, Karkal, Kallianpur and Puttur. These schools would not only train the young but would be an object lesson to the elders, who will not be backward to realise that there is money in that profession. If with such an agricultural grounding some of our young men migrate, they need not be afraid that their earnings will be smaller or that their position in life will be less honourable than in other occupations. Look at the European coffee and tea planters of India, the rubber planters of Malaya, the sugar planters of Mauritius, the clove planters of Zanzibar, the cotton planters of the United States. In our own country and almost near our doors we have the fertile lands of Mysore open to us, while the vast areas of uncultivated lands in Dharwar, Kandeesh, the Central Provinces, the Punjab and Sind open out vistas of honourable employment highly remunerative as well as pleasant.

Among our industries tiles and bricks may be considered to be the most important. Yet can we point to any single individual who has received or has tried to obtain scientific training in the subject? With a scientific pottery school the vast wealth in clay could be better utilized and our young men would be able to open out factories or manage them in other localities where there

is a demand and where local supplies of raw material are obtainable. In the basins of the Indus and the Ganges and other localities large deposits of clay await the trained worker.

The coir industry in Kanara is one which is capable of great development; yet for want of training our processes are slow, our output is negligible and a large number of shells are burnt for firewood. With some organization it should be easy to start a school in the district, say at Kallianpur, where young people from other places also could be trained and our neglected wealth conserved.

Our Christians apparently consider it beneath their dignity to be trained in oil extraction, and leave it to the village *ganegar*. Pure superior oil could be produced only after proper training and our people would be all the better for that training. Our capabilities of producing oils from *undi* (*Colophyllum Mophyllum*) and other fruit luxuriantly growing in the district would then furnish lucrative employment to many of our people and conserve the cake to manure our fields or fatten our animals.

Our forests are as rich as any that can be found in India, with a variety of timber seldom equalled; but some of our young men have received training in forestry only with a view to an appointment in Government service. The idea of the possibilities of utilising this training in private life has been lost sight of. The exploitation of timber from forests and their export would give employment to many of us. With this wealth of timber in our land, could we not have started a flourishing furniture trade and trained people to produce superior furniture if a carpentry school had existed?

Then the village *achari* or blacksmith with his ancient ways is a *sine qua non* to us only because we think that his is not a trade fit for a gentleman. The time and money lost in getting the *achari* to do our work would enrich many a Christian household. Many of our young men seek similar employment in the Railway and elsewhere. Thus what is derogatory in our land becomes honourable enough in Bombay. But look at the difference in start. Our young men have to begin from the lowest rungs of the ladder, which they could have easily skipped if we had an industrial school to train our boys.

Some of our people have started the handloom industry with varying success. How much more would the people have benefited if a school of weaving with systematic training in the subject had existed and how many more would have found high employments in the weaving industry in Bombay and elsewhere?

Then as to the great majority of those who go to Bombay with an undefined idea of getting a job, how are they prepared to take up these appointments? A business or commercial training in Mangalore would ensure for them a better start and do away with expensive training which some of them have to undergo if they want to prosper. It is as easy to obtain certificates in commercial subjects in Mangalore as in Bombay if only a school is established in our town for such training.

It is not to be supposed that we can provide schools for all professions, or colleges for the high proficiency required in certain subjects, e. g., law, medicine, engineering. For these our young men have necessarily to go out; but even with regard to these it is necessary for parents to know fairly early what professions their children should follow. Instances have been known in which young

men desiring to take to engineering have chosen history as their optional subject and those desiring to take up medicine have selected some equally unconnected subject.

The conclusions which we are driven to are the following:—

(a) That parents and guardians should help to determine as early as possible in life the professions which their children are to follow, consistently with their own means and the aptitude of their children.

(b) That elementary and secondary training in agriculture, arts, industries and commerce should be given at suitable centres in the district itself.

(c) That only higher professional training should be sought at the more important centres of learning and trade outside the district.

If we accept these conclusions, what is our duty as a community that wants to get on? It seems to me:

1. That at least one agricultural school and one industrial school should be started in the district.

2. That suitable manual training should be provided in all our primary and secondary schools either by procuring a garden plot as an adjunct to the school, or by imparting instruction in a trade suitable to the locality, or by providing both so as to give alternative trainings suitable to the aptitude of the students.

3. That training in commercial subjects should be provided in secondary schools for those who desire to take up those subjects as an alternative or after completing the secondary school subjects.

4. That for higher professional training we should depend upon instruction provided outside the district, but should encourage poor but gifted students by a judicious system of scholarships or advances.

I am quite prepared to meet the objection—Yes, we know all this, but how are we to supply all that you require? Can you suggest ways and means? My answer would be—Put your shoulder to the wheel and do not depend upon others. Let each one of us do his part and take up the question earnestly. Cannot the coffee planters and landlords join together and raise among themselves a sum which will support an agricultural school? With the aid of a Government grant would not such a school provide better managers for their plantations and estates and be the means of getting better returns from their lands? Cannot the tile merchants and others interested in industries form themselves into a committee and devote a little time to the regeneration of their neighbours? Is it not our duty to show more self-reliance and more public spirit for the common good? Look at the Parsees whose numbers are about one half of ours. Driven from their homes, strangers in this land, they have carved out a position second to none in India. Should we not say to our brethren—Awake, arise or be for ever fallen!

I would suggest a beginning to be made with an Agricultural Association. If a few determined and persevering men join the executive, an agricultural school will soon be a flourishing institution among us. We shall be rewarded a hundred-fold for this as more food will be produced and such production will lead to a reduction in wages. Everything we want will cost less and we shall have surplus for export. It has been said of American labour that though the wages are high the articles produced cost less. The reason is that each man by his high intellectual skill is capable of producing more than an untrained man could do.

We complain and justly that Mangalore is a costly place to live in. The reason is not far to seek; we all are or are beginning to be consumers and not producers. If our land and labour produce more, the cost of production and the cost of living must become less. Better training in agriculture will lead to their possessing more land in our own as well as in the neighbouring districts where we could start flourishing settlements. This is one of the best ways of acquiring more political influence and of getting our position recognised by others.—*The Mangalore Magazine.*

Better training in agriculture will lead to our people taking more interest in land and

(Third Edition—Just Ready—Price Re. 1-12-0.

A COURSE OF GENERAL MATHEMATICS FOR HIGH SCHOOLS

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

Crown 8vo. 400 pages with over 195 diagrams

By V. RAGHUNATHN AIYAR, B.A., L.T.

Assistant, Teachers' College, Saidapet.

Approved as a Text-book for Schools under Public management,

vide Fort St. George Gazette, Part I-B, p. 641, dated 21-8-21.

Approved as a Text-book suitable for school use,

vide Fort St. George Gazette, Part I-B, p. 877, dated 21-9-21.

INTERMEDIATE EXAMINATION, 1923.

SELECT ESSAYS

FROM

ADDISON'S SPECTATOR

CHIEFLY THOSE RELATING TO SIR ROGER DE COVERLEY

EDITED WITH INTRODUCTION AND NOTES

BY

E. H. ELLIOT, B.A.

late of the Presidency College, Madras.

Price Re. 1-12-0. Charges extra.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

[Aug. 1922.]

THE EDUCATIONAL IDEAL AND SYSTEM *

BY

Mr. J. H. THICKETT,

Principal, Patna Training College, Bihar.

MANY of us feel that the time has arrived when an earnest effort should be made to organise the educational profession so that in all matters of common educational interest united action may be taken. This is a reason of our meeting here this evening. We shall doubtlessly continue this gentle practice of quarrelling amongst ourselves but where educational principles and ideals are concerned, it is incumbent upon us all to work in harmony.

The educational system under which we work is being adversely criticised from all sides, both from within and without, and it is high time that we, as educationists, set to work in earnest, not to defend it but to find out what is really wrong. Many find difficulty in assigning to the several factors in the system their true measure of importance. The great fault lies in our perspective which seems to be distorted to a fatal extent. The centre of interest in any educational system based on true principles is obviously the child student. What the chief interest is in the system under which we work may be debatable but it most certainly is not the child.

To some educationists examinations are more important than boys and girls. What children exist for, if not to be examined? For such persons the solution of all educational problems is to be found in "aggregates" and "pass marks." Many believe that office work and reports are of supreme

Address delivered at the Inaugural Meeting of the League of Educationists held recently in Patna.

importance. An efficient clerk often counts far more than a good teacher in making the reputation of a school and a Headmaster who submits his annual returns correctly and punctually may rest contentedly in the knowledge that he has done a good year's work. For such the millennium will doubtlessly arrive when every possible activity is governed by regulation.

The superior officer too often receives far more attention than is strictly his due. It seems to be more profitable for a teacher to study the whims and prejudices of such an officer than the character and capacities of the child or student entrusted to his care, and this is true for all grades, whether the teacher is working in a University college or Village primary school. Teachers complain, and with good reason, that the way to approbation and reward does not lie in the direction of conscientious teaching and the result is they find little joy in their work. To others again buildings, or it may be curricula or text-books or appointments, are of more value than children. For other factors look through the Education Code and in your leisure moments try to decide what the dominating interest of the system really is.

One of the greatest hindrances to healthy educational life here is a widespread endemic disease. It is usually called "dignity" but specialists would probably diagnose it as pride and false pride at that. The remedy for it is not yet discovered but a few injections of horse sense would probably give relief. We all know the symptoms; the dignified head who can be approached only through request and the dignified teacher who cannot carry a book or move a black-board

AUG. 1922.] THE EDUCATIONAL IDEAL AND SYSTEM.

529

without loss of prestige. But the dignified administrative officer is beyond hope.

All this myopic vision and misplaced emphasis on subsidiary factors simply means that we have not yet seen the light of true educational principles. We are groping in the dark but to make others believe that we know the way, we follow the path of compromise which, with all its unhealthy expedients and personal considerations often called opinion, is leading us far from the right path of true educational progress, and if the blind lead the blind, both shall fall into the ditch. The "sit-stillery" conception of the educational process dominates the system under which they work and this conception along with its companion "Docility" is essentially evil. A system which produces year by year a large number of graduates who do not read, are not self-reliant, and in whom the spirit of enquiry is dead is obviously unsound. Take the six-year old boy when he first comes to school, bright, cheery, confident and full of the joy of life and set him beside the eighteen-year old, joyless, timid and oppressed by life's burdens. Surely it is not impossible for us to bring about a change.

It is high time for us to bestir ourselves and to set about getting out of the ditch into which we have fallen. Open confession is good for the soul. Let us frankly admit our ignorance and set out on a voyage of discovery. It may be that we shall discover a more fertile region in which our efforts will be rewarded with a rich harvest. We may possibly awaken to the fact that education is a wider thing than the work done in schools and colleges, that it is really a part of the life process itself. The chief educational influences arranged in order of value are, first the

mother, then the family, with companions and teachers competing for the third place. Some administrative officers are very great persons indeed and find much self-satisfaction in describing teachers as subordinates. But the teacher, is in close touch with the child and for this reason his work is on a higher plain than theirs. In the scale of educational values, administrative officers and examination, may very well be bracketed together near the bottom, both are necessary evils.

A new spirit, manifesting itself in bold and enterprising experiments is vigorously at work in the schools of the West. The Boy Scout Organisation and the Montessori System are two of the movements in which it finds expression. That this spirit is not entirely absent from India is proved by the inspiring little book recently issued by the Oxford University Press called "Schools with a Message for India," and we ourselves have seen "scouting" activities in this vicinity in the last few weeks. This new spirit promises to revolutionise the modern educational system. All stages of the educational process from infancy to higher degree teaching are affected, and its influence may be seen in many parts of the educational field. One marked feature is that emphasis is being shifted from knowledge to activities, and self-directed, self-controlled activity seems to be one of the underlying principles. There is a general awakening to the fact that knowledge alone is inadequate as a means of education. A learned person may prove to be a very futile member of society, for life after all is wider than knowledge.

Information about experiments in the region of Western Elementary and Secondary education will be found in books like "A Path to Freedom in the School," "The

Play Way," "Educational Experiments in England" and "The New Era in Education." From a recent number of "Indian Education" we learn that Sir Arthur Quiller-Conch voiced the new spirit the other day when he gave a warning to under-graduates at Cambridge about the unwisdom of being intemperate in the pursuit of lectures. "Choose your lectures," he said, "and choose a few only. Choose those which will turn you on to reading for yourselves. It is no hoard of knowledge that you need. What you want is a harder thing to find, trained capacity. Lectures are worth very little in comparison with private and personal conversation or with the teaching given in informal classes."

Such advice will doubtlessly shock the sensibilities of those who measure the efficiency of a professor by the number of lectures he gives, or the intellectual fitness of a student by the number of lectures he has attended. Mr. E. N. Slosson in his book "Great American Universities" says: "As it is, the professors give too many lectures and the students listen to too many or pretend to; really they do not listen, however, attentively and orderly they may be." The same writer also says: "One of the unfortunate results of the lecture system is that the professors get so used to talking that they can not stop." (We shall I think find no difficulty in agreeing with Mr. Slosson but we may cherish the hope that the discovery of a remedy for logorrhoea will shorten the hours we spend in committee meetings.)

What is really happening is that the time-honoured system of class teaching is undergoing a process of rapid disintegration, because the fallacies inherent in it are now made manifest. It is difficult to understand why such a Procrustean System has held sway for so long. The problem of college

teaching seems to be centering in the right use of libraries and the accessibility of Professors. The way to get at the efficiency of a college is not by costly visit of inspection and a long report which few read through but by estimating the accessibility of the staff and the intercourse between them and the students. The nearer college life approaches healthy active family life in its arrangements, the nearer it is to the ideal. This is the great secret to be learnt from Cambridge. It is also the main-spring of missionary influence. (I heard the other day that a certain professor in a certain college was seen conversing with one of his students. You will of course keep this information strictly confidential).

There is now a clear recognition of the function of the lecture and lesson. As methods for conveying information they are being discredited. In the colleges and schools of the future they will be used only for purposes of demonstration and inspiration. The new spirit of active "auto-education" will not be passive recipients of information but active enquirers after knowledge and libraries will be their workshops. Professor Percy Nunn writes: "The ideal of a course laid down in advance for all pupils, with their achievements mapped out ahead for each session, term and hour, must give place to an ideal of progress more elastic and more closely related to the ways of mental growth. Individuals must be allowed to go more their own way... The new teaching demands a Copernican change of stand-point."

An era of vigorous educational reconstruction lies before us and we should be wise to pave the way for it by experiments on many and varied lines so that the best line of advance may be discovered. This is what is being done in England. We have strayed into a blind alley but by means of experiments in many directions we shall find the

broad highway. Kappa in his book "Let Youth But Know" writes: "I am in cordial agreement with the writer of the Upton Letters, who says:—What I want is experiment of every kind but my cautious friends say that one would only get something a great deal worse." That I deny. I maintain that it is impossible to have anything worse, and that the majority of boys we turn out are intellectually so negative a condition that any change would be an improvement.

Educational theorists seems to have been on the wrong lines in the past trying to make all students conform to one ideal type. As Professor Adams in "The Evolution of Educational Theory" shows, Milton had in view the country squire of the Commonwealth period; Locke, the country gentleman; Montaigne, the fine gentleman; Rousseau, apparently a French lady, Pestalozzi, an intelligent and contented peasant; and Herbert Spencer's education is meant for the offspring of the well-to-do. In the future, educationists will probably not concern themselves so much with an ideal type as with the provision of suitable opportunities for each child to develop its own inherent capacities. There will in fact be not one ideal type but many. With this new spirit in education to inspire us, let us then consider where we stand, let us give our real service to guiding the unfolding personality of the child in the realisation of the good, the true and the beautiful. Let us acquire a more alert of enquiry and cultivate a wider outlook, let us find the principles on which all sound educational systems are based and which are true for all time, all countries and all classes. Let us also define the ideals which animate all genuine workers in the educational field. In these principles and ideals we shall find

the bond which brings us together for united action and for the formation of a League of Educationists. The activities of the League will doubtlessly at first be confined within the limits of this province, but some of us look forward to the time when an All-India League will be formed and beyond that again to an International League of Educationists.—*The Collegian and Progress of India.*

HISTORY OF THE INDIAN PEOPLE.

LIFE IN ANCIENT INDIA

In the Age of the Mantras

By P. T. SRINIVAS IYENGAR, M.A., L.T.

D. Cr. 16mo. 140 pp. Price Re. 1. Charges extra.

By the same Author.

THE GAYATRI

D. Cr. 16mo. 48 pages.

Price 6 as. Charges extra.

KARUNATARANGINI

(English translations from the author's original lyrics in Sanskrit)

By K. KRISHNAMACHARYA, B.A., L.T.

WITH A FOREWORD

By Prof. P. SESHADRI, M.A.

Price 4 as.

"The poems are full of melody and fine sentiment."—*O. H. O. Magazine.*

"The translations are readable."—*The Daily Express.*

SRINIVASA VARADACHARI & CO., MADRAS.

CALCUTTA UNIVERSITY: MEETING OF THE SENATE.

SPEECH OF DR. HIRALAL HALDAR
ON THE 29TH JULY 1922.

I hope, Sir, that the Senate will agree that the reports of the Committees appointed by it have dealt exhaustively and effectively with the charges brought against this University by the Minister of Education and some members of the Legislative Council. Nothing will be gained by repeating in the course of this debate what has already been stated in the reports and I do not propose to do anything of the kind. I only wish to give expression to my feeling of profound regret that the deplorable situation should have arisen which made the appointment of the Committees necessary. There ought to be no friction between this University and the Government. Sir, I am not one of those, if any such persons exist, who think that the Calcutta University is faultless. But the way to point out its defects and to remove them is not the one adopted by the Legislative Council. What institution in this world is perfect? Not even the Bengal Legislative Council is perfect. Are the Universities in England and Scotland free from defects and incapable of being criticised? But can any one point out a single instance of a British University being discussed in Parliament in the spirit and in the language in which the Calcutta University has been discussed in the Bengal Legislative Council? It cannot be said that occasions for criticism and censure do not arise. I will give one example. In a biographical sketch of a distinguished philosopher who, some years ago, was Professor of Philosophy in St. Andrews University, I find this passage:—'He was unfortunate in the time of his coming to St. Andrews. The University was in the midst of a long and bitter conflict, involving litigation and much party feeling, regarding

the position of University College, Dundee the disposition of the Berry Bequest and the establishment of a medical school. The issues of the campaign affected not only the finance but the whole educational future of the University, and its incidents had more than once a disturbing effect on the actual teaching in nearly all the departments of study. * * * The extraordinary and incalculable incidents of the long struggle, when the University was "lost" and "saved" again every few months and the proceedings of the reactionaries in power were as tragic to the teaching staff as they were comic to the detached spectator, brought much worry and distraction to Ritchie, who was able, however, to relieve himself occasionally by the writing of delightfully satiric verse as well as prose skits on the ways and sayings of the tormentors.' The matter, we are told, was ultimately settled by the law-courts—we have not come to that as yet—the Universities Commission and the Privy Council. Was this made the occasion of a bitter attack on St. Andrews University in Parliament? Did the Secretary for Scotland, who is in charge of the educational affairs of that country, get up in the House of Commons and make a violent onslaught on St. Andrews? No, Sir, nothing of the kind. They, in the West, not knowing what spirituality is and possessing only materialistic instincts, manage things very differently. They understand that the function of a Minister is not to attack but to defend against attacks the departments with which he is in touch. If any of these departments be at fault, it is his business to set it right by methods other than denunciation in public. A Minister is not a hostile critic seated on the opposition benches.

Sir, it is a matter for great regret that the Legislative Council should be so anxious to interfere with the autonomy of the University. Is it not an irony of fate that a body which

has come into existence in consequence of the adoption of the policy of satisfying the country's desire for freedom should begin its career by making an attack on the freedom of the University? It is true that the State has authority over all subordinate corporations, but this does not mean that the Legislature is entitled to encroach upon the province of a University.

Sir, the trouble which has arisen is due, not to lack of funds only, but also to ill-will and animosity against a particular person. Perhaps, the unpardonable crime of that person is his extraordinary capacity for leadership. Given goodwill, honesty of purpose and mutual confidence, the whole difficulty can be easily solved in the course of half an hour's sitting of a round-table conference. I do not know whether good sense will yet prevail and the situation saved, or whether it will be the melancholy task of some future historian of this country to record that the Calcutta University, which was being transformed into a noble seat of learning by the unwearied efforts of a great man of action, was ruined because men in high places and also in places not very high, had not enough breadth of mind and unselfishness of purpose to rise above personal considerations. Bengal is on her trial, and the manner in which this University problem is handled will show to what extent she is fit for self-government.

Sir, the situation is gloomy in the extreme. The friction between the Legislative Council and the University has reacted very injuriously on the Post-Graduate Department. The work is disorganised, the staff have not been paid for two or three months, and proposals, I understand, are maturing for substantially reducing their salaries. What this means to inadequately paid men in these hard times, every one can understand. They have no other source of income, no travelling allowances to fall back upon. The teachers of the University have fallen upon evil days and upon evil tongues. But they are men of education and culture, and will, no doubt, know how to bear their misfortunes with dignity, unmindful of the taunts of persons who think it manly to sneer at them in their adversity.

But after all, Sir, can the Government, can the Chancellor of the University, afford to

look on and allow this sort of thing to go on. I am glad to note a welcome change in the tone of the Minister of Education. His last speech in the Council was very different from the one which is the subject-matter of this report. I hope it is not too much to expect that this changed attitude will be maintained and improved upon.

It is said that the autocratic Vice-Chancellor has squandered the resources of the University by embarking upon a policy of thoughtless expansion. It is not for me to attempt to defend the hero of hundred fights against the charge. I will only ask a question: Why cannot the Government do a very simple thing, an act of bare justice, which will at once remove the consequences of the alleged extravagance? Even the worst enemies of Sir Asutosh Mookerjee cannot deny that no one has ever worked, will work or can work with greater energy and devotion for the Calcutta University than he. With absolute truth it can be said that he has dedicated his life to the University. Now, the Vice-Chancellor of the Dacca University gets a salary of Rs. 4,000 per month. Sir Asutosh Mookerjee has been Vice-Chancellor of the Calcutta University for ten years. If he were paid at the rate of Rs. 4,000 a month—he ought to get more, for the Calcutta University is much bigger than the Dacca University—his salary for ten years would amount to Rs. 4,80,000. Taking into consideration the interest on accumulated arrears which ought in all fairness to be paid, and, a thing not to be neglected in these days, the travelling allowances to and from Bhowanipur and the halting charges in this building for nearly the whole of Saturdays and the days of the High Court vacation, the total would come up to considerably more than Rs. 5,00,000. Why not send a cheque for this amount to Sir Asutosh Mookerjee? I have no doubt that he will at once make it over to this University. The deficit will vanish in a moment and the University will once more begin to see prosperous days.

MADRAS UNIVERSITY:**MEETING OF THE SENATE.**

The adjourned Meeting of the Senate was held on the 11th August 1922 at the Senate House with the Vice-Chancellor in the chair.

35 % FOR INTERMEDIATE PASS.

Mr. Satyamurthi moved:

That regulation 5 of Chapter XXII be altered as follows:—

In line 4, substitute "thirty-five" for "forty."

In moving the proposition Mr. Satyamurthi said that when 35 per cent. of marks was reckoned for a pass in the B. A. degree it was proper to do the same in the case of the Intermediate also.

Mr. C. B. Reddy having seconded it, the motion was carried.

With this the adjourned meeting terminated and an ordinary meeting followed.

Ordinary Meeting.

On the motion of Mr. K. Ramunni Menon, seconded by Mr. P. Narayanamurthi, several students were granted exemption from the production of attendance certificates.

The following resolutions were then adopted:—

PROFESSOR OF INDIAN ECONOMICS.

That Mr. John Mathai, B.A., B.L., B. Litt., be appointed part time Professor of Indian Economics for a period of five years commencing from the date of his joining the appointment on an allowance of Rs. 400 per mensem.

ADDITIONAL EXPENDITURE.

That sanction be accorded for the additional expenditure incurred in respect of various items outside the budget for 1921-22.

THE FACULTIES.

That the following Fellows be assigned to the Faculties as under:—

The Hon'ble Mr. Kuapp—Faculty of Arts; Miss H.C. Sampson and Mr. Y. Narasimham Garu—Faculty of Science.

A RESEARCH SCHOLARSHIP.

That a special scholarship of the value of Rs. 130 per mensem be granted to Dr. H. Parameswaran, University Research Student in Europe, for a period of one year from 22nd July 1922, the date of termination of the scholarship originally granted to him, and that the cost be met from the University Fee Fund.

AGE LIMIT FOR S.S.L.C. EXAMINATION.

That to Regulation I of Chapter XVI, the following proviso be added, after converting the full stop into a colon:—

'provided that the Syndicate may exempt from the operation of this Regulation any candidate who will have completed the age of 14 years on or before the first day of the examination, who is specially recommended for such exemption by the Headmaster of the school of which he is a pupil and who produces a certificate of physical fitness from a Registered Medical Practitioner. Applications for such exemption must be forwarded so as to reach the Registrar before the 1st of December preceding the examination.'

B. Sc. DEGREE.

That Regulations 22 and 23 of Chapter XXIV be altered as follows:—

1 (a) In Regulation 22, for the words 'A graduate.....equivalent thereto,' substitute the words:—

'A holder of the Degree of Bachelor of Science (Honours) of this University or of a Science degree of some other University accepted by the Syndicate as equivalent thereto, or a holder of a degree in Science or Arts of this University who has passed the examination held for candidates for the B. Sc. (Honours) Degree in accordance with the provisions of Regulation 23 (i) of this Chapter.'

(b) In the same Regulation for the words 'after passing the B. Sc. (Honours)' substitute the words 'after passing the examination held for candidates for the B. Sc. (Honours) Degree.'

2. In Regulation 23 (i) and (ii) after the words 'already qualified for a degree' insert the words 'in this University' in each place.

Mr. R. G. Grieve moved that Regulation 4 of Chapter XXV relating to the L. T. Degree be altered as follows:—

In Regulation 4 (1) D (2) for the word '(e) History and Geography, one language other than English' substitute '(e) History, (f) Geography and (g) one language other than English.'

Seconded by Mr. Yates, the resolution was carried.

B. A. DEGREE EXAMINATION FEES.

Mr. P. V. Seshu Aiyar moved:—

That the following existing Regulation 1 (a) (iv) of Chapter XXXIII (as amended)

'The application fee for admission to any part or parts of the examination shall be Rs. 22 except in the case of candidates applying for admission to the examination in Group (vi) only when the fee shall be Rs. 15'

be amended so as to read as follows:—

'The fee for admission to the examination in both parts shall be Rs. 36; in either Part I or Part II except in Group (vi) Rs. 22; and in Part II Group (vi) Rs. 18.'

Mr. S. Satyamurthi seconded the motion, and it was passed.

ANNUAL REPORT.

Mr. G. A. Natesan moved that the following amended Regulation 13 of Chapter VI

"The Syndicate shall prepare annually a report of its work and shall submit the same to the Senate at its meeting in the month of December" be altered as follows:—

for the word 'December' substitute the word 'March.' The motion was carried.

ORIENTAL TITLES EXAMINATION.

On the motion of Mr. C. B. Reddy a few administrative changes in respect to the Oriental Titles Examination dates were effected.

The following resolutions were also passed:—

SRI MINAKSHI COLLEGE.

That the Senate records its opinion that the application from the Manager and Trustee, Sri Minakshi College, Chidambaram, for the further affiliation of the College in Group (v) of the

courses of study for the B. A. Degree Examination, may be granted by the Government.

BOWEN MEMORIAL SCHOLARSHIP.

That the following alterations be made in the terms of award of the Bowen Memorial Scholarship (pp. 289-90 of Vol. II of the Calendar):—

(1) In rule 1, for the words 'such graduates in Arts of the Madras University.....State,' substitute the words 'subjects of the Mysore State domiciled therein who are eligible for admission to a College of Engineering affiliated to the University of Madras to undergo a course of study for the Degree of Bachelor of Engineering.'

(2) In rule 2, line 3, for the word 'graduates' substitute the words 'subjects of the State.'

(3) In rule 3, line 1, for the word 'three' substitute the word 'four.'

COLLEGE ADMISSION COMMITTEES.

Mr. S. Satyamurthi then moved:—

That the Senate places on record its disapproval of the action of the Government of Madras in the Ministry of Education in appointing Committees composed of laymen to regulate admission in Government Colleges affiliated to the University, thereby interfering with the academic freedom of the College authorities.

In moving the above resolution, Mr. Satyamurthi said that he should not be misunderstood in bringing this resolution as attacking the Non-Brahmin movement. He failed to see any reason why there should be Committees appointed to advise the Principal in the matter of admissions. It was an interference with their academic freedom. The Principals and Professors of the Colleges were better authorities in this respect than a Committee of laymen. The Committee in assisting the Principals were merely advancing the claims of some communities, and the result was that other students were sent out simply because they happened to belong to a certain community. In the case of the Medical and Engineering Colleges it was scandalous to see that students who had passed with creditable distinction were turned away for the simple

reason that they belonged to a particular community.

Mr. Littlehailes rising to a point of order said that no reference should be made to the Medical College as it was under the control of the Surgeon-General and not under the Education Ministry.

The Vice-Chancellor said that the mover was referring to it only to give some information.

Mr. Satyamurthi continuing said that in providing facilities for a community opportunities for other communities should not be closed. Let the Government open more colleges but let them not penalise one particular community at the expense of another.

Mr. Hodson seconded the proposition and said that there was no justification for the Ministry of Education to appoint a Committee of laymen.

The Government might even go a step forward and appoint a Committee to advise the Surgeon-General as to how he should perform his operations or the Bishop of Madras as to how he should conduct his sermons.

Mr. F. E. Corley said that though he was in sympathy with the claims of academic freedom, yet he could not vote in favour of the resolution. The Government were the proprietors of many Colleges and if they wished to regulate admission to their institutions they were at perfect liberty to do so.

Khan Bahadur Mohamed Osman Khan Sahib also opposed the motion and said that they were extremely thankful to the Government for appointing such Committees.

Mr. Ratnaswami said that the proper place to discuss the question was the floor of the Legislative Council. They were not justified in adopting this motion.

Rev. W. Meston also justified the action of the Government.

Mr. T. V. Seshagiri Aiyar pointed out that it would be a dereliction of duty if they did not express their views on an important matter of this kind. If the Government were to act like the proprietors of the colleges as described by Mr. Corley and by the Rev. Meston they might

even state that the failed S. S. L. C.'s might also be admitted. There were also constitutional and legal points arising out of this interference.

Mr. G. A. Natesan in supporting the proposition said that the mover had carefully worded the resolution and there would be no difficulty in accepting it as it only protests against the interference of the Government with the discretion of the Principals. If they wanted to give more facilities for other communities the Government would be well advised to lower the standard of admission. Further it was wonderful to note that in a certain case one who had not even passed the School Final Examination found a place in the Committee.

Mr. Davies opposed the motion.

Mr. Chatfield supported it.

Mr. Littlehailes said that the policy of Government since 1887 had been to show concessions to backward classes. The policy had been systematically adopted. As regards the admission of students he said that several students who were provided with admission cards for seats in the Presidency College did not turn up at all. It must be concluded that they had secured admission elsewhere. Moreover there was no complaint till now from the students turned away without admission. Hence in practice it did not do any harm to any community.

Mr. K. V. Rangaswami Aiyengar in further supporting the motion said that they should not tolerate any infringement of the autonomy of the College authorities.

Mr. Justice Coutts-Trotter pointed out that the resolution if passed would have no effect at all.

Mr. C. R. Reddy said that when no injustice had been done to any community and when the resolution would have no effect, the mover should withdraw the motion.

Mr. R. M. Statham said that the position of the Principals of Government Colleges was rather a delicate one.

In the end Mr. Satyamurthi withdrew the motion as, he said, he had gained a moral victory in bringing the proposition for discussion.

Special Meeting.

A Special Meeting of the Senate was held on the 12th inst. to discuss the principles embodied in the Draft Bill relating to the reorganisation of the Madras University and to pass resolutions expressing its opinion on the various clauses of the Bill. The Hon'ble Mr. K. Sreenivasa Aiyengar, the Vice-Chancellor of the University, took the chair.

The Advocate-General Mr. C. P. Ramaswami Iyer made an introductory speech on the origin of the Bill and in the course of his remarks pointed out that he was there as the spokesman of the Syndicate. He did not commit himself to any particular course in regard to the resolution but would be guided entirely by the discussions that took place at the meeting. But it would not do for any member of the House to commence discussion with any thing like a party plea. The Bill started with the idea that it was useful and expedient to start a Residential and Teaching University at some place and the question to decide was whether it was necessary or not. The fundamental point was whether the need for attempting the experiment had arisen.

FIRST RESOLUTION.

Mr. C. P. Ramaswami Iyer moved:

That there should be established a Teaching and Residential University at Madras, with constituent Colleges within the limits of the University.

The Director of Public Instruction seconded the resolution.

AMENDMENT.

Mr. F. E. Corley moved the following amendment:—

That the words in Resolutions 12 and 13 be left out and that the words "That, subject to the necessary limitations imposed by geography, the affiliated Colleges should be maintained on a footing of equality with the constituent Colleges until such time as they may be severally or collectively transferred to the Universities" be inserted as Resolution 12.

In moving this amendment, Mr. Corley pointed out that the Bill was a little vague. It was im-

portant that the element of vagueness should be cleared away. What was to be the relation of the University to the Colleges? Unless they were absolutely forced to do so, he did not want that they should sacrifice what already existed. It had never been true of the Madras University that it was content merely to conduct examinations without being at any pains to assure itself that any courses of instruction were given to prepare pupils to the examinations in question. The best thing they could do was to pursue the line along which they had been already proceeding. In the end, he urged that the mofussil Colleges should be treated on a footing of equality with those in the city.

Mr. P. Subrahmanyam seconded the amendment.

Mr. S. Satyamurthi, in supporting the amendment, remarked that the term 'Teaching and Residential University' was an over-worked phrase and it was a vague desire. Under the existing Act, there was no provision which prevented them from appointing as many Professors as they pleased.

Mr. O. Ramalinga Reddy pointed out that there was no idea of relegating the mofussil Colleges to an inferior position and added that the Bill was not very different from the one passed by the Senate.

Mr. T. V. Seshagiri Iyer stated that so far as teaching was concerned, there could not be any equality between the position of Madras Colleges and the mofussil ones which had to occupy an altogether different position in that matter. Mr. Corley's amendment appeared to him to be a blocking one intended to block the chief purpose of the motion before the House.

Mr. R. Littlehailes, Director of Public Instruction, dwelling upon the vital differences between older and newer ideals of the University, stated that geographically the Teaching and Residential University should be located at any particular place and Madras was selected. The mofussil Colleges would lose not a single privilege which they were enjoying at present and the affiliating system would still continue. With the specific object of allowing them to consider matters

specially concerning them and voicing their matters upon problems common to them, a Council for Affiliated Colleges was proposed in the Bill.

Rev. Gardiner, rising to a point of order, wanted to know if this amendment if passed would rule out other amendments to be proposed.

The Vice-Chancellor in reply observed that in such a case, certain amendments would obviously drop out.

Mr. H. C. Hodson, Director of Public Instruction to the Travancore Government, sympathised with the claims of the Metropolis and said that there was no opportunity for other constituent colleges to convert themselves into Universities. Time was needed for the gradual consolidation and concerting of measures necessary for the creation of other Universities. There was no positiveness about the proposed Council of Affiliated Colleges.

Mr. K. V. Rangaswamy Iyengar observed that the mofussil members were not consulted before on the matter of the mofussil colleges. His apprehension was that the Bill would help in the rapid extinction of the mofussil colleges. A discrimination was made on two very important matters—in regard to the manner in which the most important body, the Academic Council, should be constituted and the Council of Affiliated Colleges. Mr. Corley's amendment did not go sufficiently far in allaying the apprehensions of the mofussil members. Was it impossible, the speaker asked, to distribute the constituent colleges throughout the Presidency as was done in the Mysore University?

Major-General Giffard, Surgeon-General with the Government of Madras, thought that Mr. Corley's amendment was a direct negation of the original resolution. He was not a friend of this kind of reform, as they were setting up in Madras a new kind of University which would divide the old one into two distinct halves.

Rev. William Meston, Principal of the Madras Christian College, said he was in favour

of the principle of Mr. Corley's amendment. It was an opportunity for them to say that there should be no inferior position for the mofussil colleges as an effect of the Bill. They could still support the Bill and at the same time not regard this amendment as ruling out the original proposition.

Prof. K. Ramanujachariar opposed the amendment.

Rev. Allan F. Gardiner opposed the amendment, saying that it would block other amendments which were more definite. It would offer a far superior training than they had up till now. Under the system created by the new Bill, the Madras University would find its own colleges to be in rivalry with itself. There would be also additional friction, if not bitterness, between the students themselves. It was time that they should insist upon something more definite than what this amendment gave them.

Mr. T. S. Sundra Iyer, in opposing the amendment, said that the University of Madras had been hampered in its work by having to attend to a vast number of colleges and as a result education had suffered both in quantity and quality.

Mr. P. Subrahmanyam dwelt upon the immediate and pressing necessity of a separate Andhra University. They wanted to know when exactly they could have it. If it was not possible to create an Andhra University, he felt bound to oppose the present measure. The issue raised by Mr. Corley's amendment was a very vital one.

Rev. Carty observed that the Madras University which had been Presidency-wide was proposed to be made a City-wide one suddenly. He wanted some of the advantages which Madras would enjoy under the new conditions to be given to mofussil colleges. He demanded it in the interests of students and educated classes. When a University with a comparatively higher ideal was set up in Madras City, he feared that the rest of the Presidency would inevitably be brought down,

Justice Coutts-Trotter in a short speech stated that all that was wanted was a very general enunciation of the general principles underlying the Bill but the amendment under discussion attempted to draft details which it was not advisable to do.

The amendment was then put to vote and declared lost.

SECOND AMENDMENT.

Mr. F. E. Corley moved:

That in Resolution 2 (b), the words 'a Board of Studies for each department of teaching' be left out of the Resolution and that the words 'Board of Studies appropriate to the various courses of instruction and research to be pursued in the University' be added or inserted.

In moving the amendment, Mr. Corley recognised that the main work that any University would be called upon to undertake was teaching but he maintained that it was unfair to and a slander upon the Madras University to suggest that, in the past, they had kept their teaching work in any secondary position. The true idea of the University of Madras was one which comprehended colleges as well as the institutions centralised in the Senate building. He would argue that for more than 20 years past, Madras had been a Teaching University. The line of advance for the Madras University should not be in the direction of an Unitary University. It should be along the line of reinforcing the colleges and only appointing University Professors or Readers for colleges where it was found to be a necessity. In the existing colleges they had the machinery outfit that was needed for the necessary duplication, for, the teaching of the students in smaller rather than in larger bodies was educationally sound in principle. Concentration of teaching in a University as distinct from the colleges would not be a gain, but a loss. He for one believed that, by making the University residential, they would enormously increase its effectiveness as a teaching University; but it was obvious that

the insistence upon residence with all that 'residence' carried with it—residence in colleges and hostels vitally connected with the University, should not be confined to Madras city alone. They could make arrangements for residence in the mofussil centres just as well as in the city of Madras.

Mr. C. Ramalinga Reddy reminded the House that the Senate itself had once pointed out that the teaching side was not very satisfactory and there was likely to be some conflict of interests between the University and the constituent colleges, if the teaching functions were to a greater degree over-emphasised. If there was any necessity, he was of opinion that the University should undertake to impart instruction directly by the appointment of professors and so forth.

Dr. John Mathai said that the Oxford University developed the teaching side of its central agency in respect of almost entirely new subjects and old subjects as well in which there had been an immense development of new thought—subjects which it would be impossible for individual colleges to organise to teach.

Mr. S. Satyamurthi, in supporting the amendment, said, it raised an important issue whether the time had arrived for a Teaching University for Madras. The Bombay Senate had considered the recommendations of the Sadler Commission and turned them down saying they were not good for them. The Calcutta University of which Sir Asutosh Mukherji was the distinguished Vice-Chancellor and a Member of the Sadler Commission itself, had not done anything to carry out their recommendations. But Madras wanted to go forward. Dr. Miller had written to the Christian College Magazine that the Oxford University was not to be a model for Madras and that the Sadler Commission Report was not intended for Madras. The speaker finally begged the House to pause and not hurry in the matter. Did the new Intermediate system

emphasised upon very much by the Sadler Commission come into existence here? The Madras University wanted to build up the top-story first.

Messrs. Zumbro, A. Krishnaswami Iyer, K. V. Rangaswami Iyengar and Ramunni Menon opposed the amendment.

The amendment was put and lost.

THIRD AMENDMENT.

The Rev. Allan F. Gardiner moved:

That in Resolution 1 (a) the words "as soon as arrangements have been made for the simultaneous establishment of similar teaching and residential Universities at other educational centres within the sphere of the University of Madras as constituted prior to the commencement of this Act" be added after the words "within the limits of that University," and that the period after "University" be left out and a comma inserted in its place.

In moving this amendment, Mr. Gardiner pointed out that the Senate had already passed a resolution in October 1920, approving the establishment of more Universities in the Madras Presidency. His amendment demanded what the Senate had already accepted less than two years ago.

Mr. Proserpio seconded the amendment.

Mr. C. Ramalinga Reddy opposed the amendment.

Mr. A. Krishnaswami Iyer, in supporting the amendment, said that, unless Government was in a position to assure them that they could establish two, three or four teaching Universities in the Presidency, there was no use of embarking upon this measure. The Government might say that it had no necessary finances. He knew that it had not got the necessary funds for a real teaching University even at Madras. He thought that the scheme was not merely to impress on the electorate that one teaching University had been established.

Rev. Carty and Mr. G. A. Natesan supported the amendment.

Rev. William Meston, Principal of the Madras Christian College, observed that it was an extraordinary thing to say that, because they could not do the whole thing at once, they should do nothing.

Mr. T. V. Seshagiri Iyer said that the object of the Government was to try this experiment at a place where it was likely to succeed.

Mr. R. Littlehales, Director of Public Instruction, accounted for the choice of Madras, saying it had 12 colleges within the area under consideration. If any member could come forward and say that he had selected a far better centre, then he would like that place to be considered in preference to Madras.

Mr. S. Satyamurthi questioned why the taxpayer of Ganjam, Tinnevely and Trichinopoly should pay for the purpose of creating a teaching University in Madras. Trichinopoly, Rajahmundry and Vizagapatam were equally good centres, if Government would make up its mind to spend such amounts of money there. For plain living and high thinking, for the teachers and the taught to live together, he would prefer a mofussil centre.

The Vice-Chancellor explained the scope of the amendment and said it meant that till they were in a position to establish four or five similar Universities, they were not to start one in Madras. It was really a direct contradiction of the original proposition, though in form it was not.

The amendment was then put to vote and the announcement that it was carried by 27 against 24 was received with loud applause by a section of the House.

Then there was a very keen and lengthy discussion in which several took part on the position created as a result of the passing of the amendment and as to whether the remaining items on the agenda could be discussed. Mr. Corley wanted that the meeting should be dissolved and all that remained on the agenda should be referred back for reconsideration by the Syndicate and proposed an adjournment until sometime in September. The Vice-Chancellor remarked that Mr. Corley's proposal was beset with two difficulties. They could not refer all these points to a Committee. The meeting in September would be a Special Meeting and there was the question of funds.

Mr. G. A. Natesan then moved for an adjournment of the Senate to 4.30 P.M. on the day fixed for the next Ordinary Meeting and to wait for the considered opinion of Government meanwhile.

This proposition was assented to.

EDUCATIONAL TOPICS.

Education in France since the War.

A professor in the University of Lyons, writing in a recent number of *The Pedagogical Seminary* congratulates France upon the fact that everywhere the war has awakened admirable zeal for retaining academic work in school, for exalting patriotism among students and for organising their co-operation in war-time activities. Enthusiasm and desire for progress have also asserted themselves in the University as well. Material and financial means are lacking for the dissemination and advancement of science and buildings, laboratories, and collections are still too meagre. A special impetus is bringing progress to higher technical instruction (agricultural, industrial and commercial) in special institutions as well as in Universities, where institutes of applied science are increasing in number.

"Every day there is developing more and more intensely, and more flexibly, the movement for extension of our higher education in foreign fields. Favoured or demanded by Parliament, the Ministry has organized the National Bureau of Universities (*Office National des Universités*), the Pedagogical Museum (*Musée Pédagogique*). Not only is there an increase in the number of exchange professors with America, very recently with Belgium, Italy and Spain, not only are we receiving more and more foreign students and sending to foreign countries men and women scholars, but we are consolidating those relations by permanent establishments. At Paris especially chairs have been created by foreign governments (United States, England, Czecho-Slovakia) and in these countries and others (Roumania, Serbia) for our professors. Last October a Chinese University was established at Lyons. Reciprocally France has established instruction, or an entire system, in some of these countries, as our Institute of London

of Florence, of Madrid, of Syria (schools of law, medicine, technical school of Beirut). There is under consideration a plan for combined organization of scientific and University relations between Japan and France, and with apologies for unintentional omissions I insist that this entire service is growing and assuming definite shape both in the Ministry of Public Instruction and that of Foreign Affairs as well as in each University.

"*Secondary Instruction*—Secondary instruction is on the eve of a reform which will perhaps be an accomplished fact when these lines appear. As we are trying to reform it at one stroke, without partial experiments, it would be impossible to introduce in it the various innovations which I have indicated in higher education. During the war, it too lived by an admirable effort. Since the war the *lycees* for boys have regained part of their personnel, the teachers who survived, and they have resumed their regular life, diligent in spite of everything, and in spite of the complaints that are heard. This group, like all others, has engaged in a heated campaign to obtain necessary increase of salaries and without doubt a happy innovation, born of circumstance, may be expected—a spirit of solidarity which, forcing the hand of the old individualism, has drawn together in associations and federations not only the entire personnel, men and women, of the secondary schools, but also all the members of the University corps and of the three branches of instruction. This spirit, one may hope, will survive fortuitous demands and, moving forward, will give its attention to pedagogical questions.

"With regard to primary instruction it has largely improved in the progress of teaching in the practical arts and physical education.

"The teachers have entered with especial ardour the campaign for increase of salaries; but here too one must note as progress the spirit of solidarity which has drawn them to the two other groups.

"The most important innovations are the thorough going reforms in the higher grades. This

is especially the task for directors of primary education. There has been a desire to make flexible its scope and programmes, to animate its methods and to raise its level even to that of scientific work.

The extra years' courses, which used to add only one year to elementary studies, are becoming substitutes for the upper primary school, allowing, according to their clientele, extra courses of even four years, and adapting themselves to needs, whether general preparation for normal school or professional education, especially agricultural, and finally combining with industrial courses.

"The role of higher primary schools is "to form human beings who, under the direction of leaders from the Universities and higher schools, may constitute the framework of the economic and administrative army; foremen, overseers, clerks." They are preparing students for city careers and normal schools. The duration of their studies, instead of being limited to three years, can be prolonged to four or five. Hitherto rivalry, at the risk of useless repetition, existed between these and the technical schools, which are under the control of another Ministry; and the duality, if not conflict, seemed incapable of solution. It has just been settled, thanks to the creation in the Ministry of Public Instruction itself of an under-secretaryship of technical instruction. In each of the two kinds of schools either general or professional education, one of which will be subordinate to the other, will predominate, the two personnels will no longer be controlled by two Ministries, the programme of the upper primary schools is lightened; above all, instruction will no longer be concentric, but progressive; each year the student will see something new, will have the knowledge and pleasure of advancing."

The same idea dominates the more radical reform of normal schools. They are retained instead of being replaced by pedagogical institutes of the University or reduced to one year of

professional training following classes in the *lycees*. They remain primary; but the regime of 1909, which superposed on two years of preparation for the higher diploma (*brevet superieure*) a year of both personal and professional training, has been given up.

Continuation Schools in Norway.

(Taken from *The Pedagogical Seminary* for June, 1922).

These schools are meant for young people between 14 and 18 years of age; and instruction is given free, of a course of from 4 to 10 hours a week.

The Christiania Continuation School for Girls, started in 1900, has got day-classes of 30 hours a week and evening classes of 10 hours a week. The course of study is interesting.

The course of study is in the main the same for the day classes and for the two yearly evening classes:—

1. Manual training: Dress-making and sewing of baby outfits; millinery; domestic service.
2. The mother-tongue, including sociology.
3. One foreign language (English).
4. Book-keeping and mathematics.

To the above is added, in the day classes, hygiene with gymnastics and outings, plus one weekly hour of Bible reading.

Singing is not a separate subject, but shall be taken care of during the school hours. Also for the evening classes one tries to get gymnastics in for those who can possibly give time to it. Special social evenings are arranged.

Practical history, geography and natural science are included in the mother-tongue lessons and are given in connection with topics of the day, daily events, etc., a main principle of the continuation school being the keeping in close touch with practical life of to-day. Therefore practical sociology also has a broad place, including topics as "The Family," "Parents and Children," "Matrimony" (and laws concerning this), "Social Institutions," "Employer and Employees" (laws.)

"Vocational outlook" is given with special reference to the particular trade schools the girls can enter upon leaving the continuation school. The school has its own library. Literature and arts, especially of modern time, are given consideration (mainly within the mother-tongue), and everything that might have an inspiring influence upon the girls is looked for.

Practical outlooks (especially for the pupils of the day school who have time) are given by visits to orphans' homes, children's hospitals, "first-aid" places, the market-places (open squares in the city where the farmers sell their products directly to the consumers), butcher shops, groceries, bakeries, cooking schools, dressmaking factories, etc. Goods, prices, methods of work, etc., are thus brought home to the girls. Practical museums are also visited. Here the girls may make sketches, for later use in their own sewing, embroidery, etc. The school has also a special trade course for women tailors, frequently visited by all the girls. Outings are undertaken both summer and winter. Sea-bathing trips and skiing trips are most popular.

There are also technical evening schools, where the course lasts for 3 to 4 years, as well as special house-hold and cooking schools. Now the State has undertaken to organize compulsory continued education by national law. The main features of the proposed law are as follows:—

1. Every city or city-like community in the country districts shall provide for a satisfactory number of compulsory continuation schools.
2. Proposals for the country districts shall be given by a committee named by the State Department of Agriculture.
3. These schools shall further the general education and character-building of the pupils, prepare them for the vocation they choose and make them good citizens. The schools shall be compulsory, and the instruction shall be given free (of payment of fees).
4. The schools shall be arranged as practical schools. They may have a specific practical

course as the main feature, or offer a general practical further schooling. Vocational classes shall be established everywhere, where conditions make it possible. By vocational classes is understood a special course that gives a complete training for tailors, mechanics, electricians of various kinds, etc. Workshops shall be procured in connection with such schools.

5. For such vocational continuation schools a course: *Arbeidskundskap* (all knowledge of everything pertaining to the particular trade or vocation; compare Kerschenshteiner's *Arbeitskunde*). This particular course shall be given fully one-half of the entire school time.

6. The schools shall not only be vocational, but also have a cultural aspect. Thus social economy and a course in the mother-tongue shall be included.

7. As the pupils also have their jobs to attend to, during the schooling, the school time must not be long. Proposed: 8 hours weekly for 30 weeks a year, or 240 hours annually, throughout the 3 compulsory years of schooling.

8. If a child has 48 hours in all of work, in its job, 40 hours shall be given to the job and 8 hours to the school. No instruction is to be given after 7 p. m.

9. For children not yet having entered upon a vocation or trade, schools with general training courses shall be established. The curriculum here shall include social economics, a course in the mother-tongue, natural sciences and manual training.

10. The continuation schools shall by and by get to be independent schools, with separate buildings, equipment and teachers.

11. It is proposed that the State shall pay the salary of the teachers, and that the local communities furnish buildings, equipment, etc.

12. *Administration.* The local school board shall administer the schools, but for every vocational class there shall besides be named a vocational committee consisting of three members. One of these shall be named by the school board.

of the two others, one by the local employers and one by the labour union of the particular vocation. This committee has the responsibility for everything pertaining to the particular vocational training, draws up plans, etc. Their proposals, however, must be passed upon by the school board.

13. The State Department of Education shall have the upper authority.

14. All teaching positions shall be filled by the State Department of Education through competition and by proposal of the local school board (the same as for the higher schools of Norway).

15. Beside the compulsory 240 hours annually in 3 years, opportunities for further free schooling shall be offered in general school subjects, practical courses and foreign languages.

16. For hours of instruction the number of pupils in a class shall not exceed 30; for instruction and work in the work-shop, not 15.

17. This law is proposed to be carried through within the first 5 years after it has been passed upon by Congress and Government.

Finally, free day schools with 30 hours weekly instruction for 1 or 2 years may be established as an eighth and a ninth grade of the public school. The annual expenditures for teachers' salaries are estimated at 2½ million crowns.

The International Moral Education Congress.

The 3rd International Moral Education Congress which ought to have been held in Paris in 1916 was to meet at Geneva in July-August, 1922.

Delegates of many nationalities will discuss two main themes: (1) the international spirit, with special reference to history teaching, and (2) solidarity and practical social service. Between thirty and forty papers will be presented (not read), and some of the writers and topics may be named: Mrs. Wintringham, M. P.: "The Motive of Service"; Sir R. Baden-Powell: "Education in Love in Face of Fear"; Mr.

G. P. Gooch: "Advanced Historical Teaching"; Mr. Cloudesley Brereton: "The Teaching and Problems of History in English Secondary Schools"; Mr. F. J. Gould: "History Teaching as an Educational Aid towards the League of Humanity"; Mr. A. Yusuf Ali: "History Teaching in India." In the United States the Dean of the University of Columbia has arranged five contributions from Dr. John L. Elliott (New York Ethical Society), Mr. Rowland Haynes of Cleveland, O., Mr. H. N. MacCracken (President of Vassar College, Pough-keepsie, N.Y.), Mr. Angelo Patri, and Prof. Frank C. Sharp (of the University of Wisconsin). The list of Continental essayists is not yet complete; it includes French, German, Swedish, Dutch, Polish, and Czecho-Slavic writers. More than twenty National Committees support the Congress; they are not so much business bodies, as enrolments of sympathisers. Some eighty names, representing many schools of thought, figure in the British list. Other groups have been enlisted in Canada, South Africa, India and New Zealand, and names are awaited from Australia.

On the opening day, July 28, addresses will be delivered by Dr. Ferriere, author of "La Loi du Progres"; Sir Frederick Pollock, who since 1914 has been Chairman of the International Executive Council, meeting in London; and F. W. Foerster, Professor at the University of Zurich, and author of "Jugendlehre." Prof. Foerster will speak on "The Value of History in Moral and Social Education, treated from the View-points of Humanity and the Supra-National Spirit."

Supply of College Men.

A note in *The Journal of Education and School-World* (for June) says that the war has had a various and hitherto unrealised effect on attendance at colleges and Universities. It proceeds to say:

Whilst the shortage in France for the four years of struggle was 66.4 per cent. and in the British Empire rose at one time to 37.3 per cent.,

in Germany, provident for peaceful competition after war, the deficiency of men students for the whole period was only 6.7 per cent., whilst the number of women students increased from 4,056 in 1914 to 6,969 in 1918. It is pleasant to learn that there has been a great recovery in the British Empire: against 20,748 students in 1916-17, there were in 1920 no fewer than 73,705, and still the academic population grows. We, for our part, cannot swallow the sugary doctrine that every bricklayer should have a University education. But we rejoice that the old fear of an "intellectual proletariat" has gone. As the business of life becomes more complex and technical, the more does it ask of science, and the more can it absorb of the scientifically trained; indeed, economically, a failure in the supply of highly-cultivated intelligence would be as disastrous as a failure of corn crops. Democracy, if it is not to degenerate into misrule, requires nobly educated leaders; and should we grudge the Universities to the people, we could not complain if they proved to be incapable in their building or blind in their destroying. Nor are we thinking only of the lower world; it is good that as many as possible should have entrance to those sublime regions the describing of which Sir James Barrie would have to leave to McConnachie. Yet, for all this, we must not forget that it is easy to ruin a machine by overfeeding it with unfit material, and we must keep our academies strong and worthy of their good name.

Supplementary Aids to Class-Work in Mathematics.

The use of devices called in German *Anschauung* to make abstract ideas more easy by embodying them in models and diagrams is very important in the teaching of Mathematics. In Geometry there is an endless scope for supplementary aids according to a writer in *The Journal of Education*:

(i) The making of paper and cardboard

models of familiar objects, toys, &c., is often recommended but quite insufficiently practised. It offers the best possible means of interesting beginners in common geometrical figures and their salient properties, of teaching the skilful use of the constructions for drawing parallels and perpendiculars, and for the bisection of lines and angles, and of cultivating the apprehension of three-dimensional space—a power which is too often sadly neglected in the school course. (ii) In the second stage of the subject the importance of what I once proposed to call "boy scout geometry" can hardly be over-emphasized. As the name implies, the work includes outdoor exercises in mensuration and surveying, conducted by means of the chain and cross-staff, the plane table and compass, and some simple anglemeter or theodolite, followed up in class by the solution of problems by drawing. (iii) Simple mechanical devices may often be used with good effect to illustrate the ordinary theorems of geometry. Here are a few examples. (a) Frames composed of wooden rods freely jointed at their ends by screws are useful in bringing out the condition which determine the shape of a figure. It is, for instance, seen at once that a frame composed of four given sides may assume an endless number of shapes, while the shape of a triangle is unambiguously fixed by the lengths of its sides. (b) A short length of expanding lattice-work (such as is sold for fencing gardens) serves well to exhibit the properties of a series of parallel lines and of parallelograms. (c) The mutual intersection of the diagonals of a parallelogram is shown by a freely jointed wooden frame the opposite corners of which are connected by elastic threads. A cell or parallel-piped made of cardboard will illustrate the corresponding theorem for three dimensions. (d) The constancy of the angle in a circular segment is rather strikingly shown by drawing a circle on the blackboard, attaching the ends of an elastic thread to two points of the circumference by means of drawing pins, and then pulling the thread taut by a pencil whose point

follows the arc between the two pins. (e) There are several well-known proofs of Pythagoras's theorem by dissection; these are best taught by requiring the pupil to piece together figures cut out of cardboard or wood, after the manner of a "jig-saw" puzzle. Mr. W. Huggett, Headmaster of Wornington Road L.C.C. School, has devised a most entertaining as well as instructive model in which the pieces move to their places automatically as the operator presses a series of buttons. It would be an excellent thing if more moving models of this kind were at the disposal of teachers. (f) Some of the fundamental theorems in solid geometry (e.g. the theorem about the perpendicular to a plane) become extremely obvious when the pupil is permitted to demonstrate them from models instead of from perspective figures in one plane; and the construction of such models from cardboard and elastic thread offers very little difficulty. (g) The elementary facts about perspective should certainly be included in a school course and are easy to bring out by means of models. A beautifully illustrated little book by Dr. G. Wolff, *Mathematik und Malerei* (Teubner), is full of excellent suggestions with regard to this subject.

Orthogonal and conical projections are topics that gain a great deal from material illustration, and should certainly have a place even in an elementary curriculum. For orthogonal projection one may use the rays of the sun (bent horizontally by reflection in a mirror) or arrange the use of the optical lantern so that it emits a roughly parallel beam. Objects are held in the path of the beam and the class observes the forms of the shadows. One of the most instructive exercises consists in projecting figures illustrating properties of the circle so as to bring out the corresponding properties of the ellipse. The figures may be made by cutting paper to the required shape (e.g. a circle containing a series of parallel chords) and pasting it on a sheet of glass. For conical projection the light from an electric torch serves well enough.

The same writer proceeds to say with regard to Trigonometry and Geometry:—

In teaching Trigonometry, supplementary aid may be derived from Geography, Astronomy, and Physics as well as from surveying. The connection with Geography brings in the neglected study of Spherical Geometry and a simple treatment of map-projections. Elementary work in Astronomy involves many most instructive mathematical operations including the making of sun-dials. My own custom is to give an important place to the construction of (i) a cylinder and (ii) a cube, each covered with a network of lines (lines of right ascension and declination) upon which the positions of the heavenly bodies may be recorded and by means of which the nature of their movements may be studied. The study either of map-projections or of the "celestial cube" may be made the means of arriving with extreme ease at the fundamental formulæ of Spherical Trigonometry—again a subject undeservedly neglected in our schools.

The point of contact between Physics and Trigonometry is, of course, the study of harmonic motion and of harmonic waves. Both subjects lend themselves to illustration by experimental methods well within the power of an ordinary mathematical teacher, and the mathematics gains immensely from such illustration. Unfortunately it is not possible to deal with them here and I must take the liberty of referring the reader to what I have written about them—and also about map-projections and Spherical Trigonometry—elsewhere.

Algebra, on account of its abstract nature, tends to degenerate into a mere juggling with symbols unless steps are taken to ensure *Anschauung*. For instance, it is well to lay stress on the fact that directed (i.e. positive and negative) numbers fix the position of a point on a line with reference to some zero-point. To make clear what this means a graduated line should be chalked in a convenient place on the class-room

floor, and boys should be made to work out such operations as $-6 + 9 - 4$ by moving backwards and forwards along it. The vitally important idea of a function may well be taught by an extension of the same device. We have two graduated lines, and two boys whose duty is to move along them, one being called X, the other Y. Y is informed that his position and movements on the line are to depend on those of X in accordance with some law which will be varied from time to time. For example, if the law adopted is $y = \frac{1}{4}x^2$, then Y's distance from his zero-point (y) must always be one quarter of the square of X's distance (x) from the zero-point on his own line. Thus, as X walks continuously from the positive end of his line through his zero-point to the negative end, Y, obeying the law imposed on him, advances from the positive end of his line to the zero-point, and then retraces his steps. The representation of the character of a function by a graph is best taken after this exercise. The graph brings the X and Y lines together and exhibits the way in which the positions of the two moving boys (or points) are correlated.

Higher Education in Egypt.

The existing state of higher education and the report of the Commission appointed to draw up a scheme for the creation of a National University in Egypt are thus described and commented on by a writer in a recent number of *The Journal of Education and the School-World*.

Of the debt that we owe to Egypt for its old-time service to civilization and to art too small a part has been discharged. It is in respect of higher education that the arrears are greatest. True that seven Higher Government Colleges, those of Medicine, Law, Engineering, Agriculture, Veterinary Science, Commerce, and the Sultania Training College, promote their several branches of knowledge. But they are so far insufficient for those who would resort to them that eight hundred Egyptian students are driven annually to seek instruction abroad. If a Uni-

versite Egyptienne was founded in 1908, it has suffered for want of funds, nor has it either fit buildings or a permanent staff of professors. If the ancient University of El-Azhar is frequented by twelve thousand students, its teaching is chiefly theological and literary. If the American Mission has raised money for the creating of a University at Cairo, the project has not yet got beyond the stage of inception. To defend the existing Higher Colleges from competition, and to assert itself in its own house, the Egyptian Government resolved to establish a State University, and the Final Report of the Commission appointed in 1917 to elaborate a scheme for such an institution is now made public.

The Commission recommends that as soon as possible a national University should be established with seven Faculties, viz., Arts, Science, Medicine (including Dental Studies), Law, Engineering and Architecture, Agriculture, (including Veterinary Science), Commerce and Economics, and that special Departments of Education, Oriental Studies, and Archaeology should be included in the Faculty of Arts. The Higher Colleges, not controlled as now by different Ministries, should be incorporated as Faculties of the University. The new Faculties of Arts and Science should provide *liberal* training and offer a two years' course covering what of arts and science is required as preliminary to the specialised studies of the other Faculties. But a University is not a mere cluster of Faculties, a congeries of Schools; it must be a unifying and organized whole. It is intended that the projected academy should be not only a teaching University, but also, as far as possible, residential, and that it should "create traditions now lacking, and foster a corporate spirit among students of all classes." Again, unity is to be secured by the system of administration. "The University," says the Report, "should be a self-governing corporation, with a separate division assigned to it in the State Budget." Its head, if the plan be

realized, is to be a Chancellor, and its administrative powers are to be vested in a Court, a Senate, and the Faculties, the sphere in which each authority has competence being carefully defined.

We observe with satisfaction that the Report contemplates an improvement in the training of teachers. Generally approved will be the judgment that "in an Egyptian University the medium of instruction should be the language of the country," and that Egyptian teachers of proved ability should be enabled as soon as possible to qualify themselves as lecturers in the University. Some hostile criticism may be called forth by the connexion adumbrated between the University and the State. In the United Kingdom the Universities have always been independent of governmental control. The scheme of the Egyptian Commissioners lays down that the Chancellor of the University is to be the Minister of Education *ex officio*; a President to whom he may delegate his duties is to be appointed by the Council of Ministers on the nomination of the Chancellor after consultation with the Court; and the Court itself is to contain a representative of the Ministry. But a large measure of academic freedom would be left to the Faculties, which, severally or in conference, would determine the courses of study and the conditions on which degrees are conferred; and the impartial method suggested for the selection of professors resembles that pursued by the University of London. Of the Report in general we may say that it is a conscientious and penetrative document. We venture to urge that it should be discussed by Egypt in the sober and placable tone that pervades it. National oppositions are wont to be injurious to education. For intellectual Egypt the fairest hope lies in harmonious development through that fusion of cultures symbolized of old by those who set up statues of the Greek gods in the temple of Isis.

The Geddes Committee and Education.

The report of the committee for cutting down national expenditure presided over by Geddes made the following proposals for educational retrenchment:—

"(1) Of recent years the national expenditure on education has far exceeded what the country can at present afford. The cost of elementary and secondary education per pupil has increased unreasonably. The incidence of cost has been transferred increasingly from the local ratepayers to the taxpayer, and this has had the serious effect of decreasing the financial responsibility of those who actually spend the money. The Board of Education vote has since 1918-19 grown from £19,000,000 to £50,000,000.

"(2) Children should not be taken into State-aided schools till they have reached the age of 6.

"(3) The cost of teaching must be brought down by the Local Authorities, and the only way to effect this is to tell each Local Authority how much money it can have and leave it to the Local Authority to reap thereafter the full benefit of any economies it may make. We are impressed by the position of impotence of the Board of Education in either controlling expenditure or effecting economies, once the policy has been determined. There is no doubt on the other hand that Local Authorities have been urged into expenditure upon a scale which they would not have contemplated if left free.

"(4) The grants for secondary education are providing State-aided or free education to a class which can afford to pay an increased proportion, or even the full cost of education, and children whose mental capabilities do not justify this higher and much more costly education are receiving it. We do not recommend any serious reduction in free secondary education but suggest that it should be confined to children whose mental calibre justifies it and whose parents cannot afford to pay for it,

"(5) As regards Higher Education generally and Scholarships the expenditure is in excess of the nation's ability to pay and must be reduced.

"(6) The Estimates for the Board of Education for the year 1922-23 should be reduced from £10,000,000 to £34,500,000. With the automatic reductions in Scotland this will yield a reduction of £18,000,000. Whatever proportion of the reduced sum is to be paid to Local Authorities could be so allotted by the Board of Education at the vicious results of the percentage grant system shall be terminated forthwith.

"(7) The question of the super-annuation of teachers should be examined and we suggest that this should be put upon a contributory basis. We view with alarm the liability under this head which is accruing and which, we are told, may well amount to £12,000,000 per annum.

"We have suggested that a 5 per cent. contribution on salaries should be made by teachers, which would have an immediate effect upon the exchequer but the whole question should be one into forthwith before the growth of vested interests makes it incapable of modification."

Upon this report, the Government decided to accept only a few of the recommendations and even that only with large modifications.

"The Government have appointed a committee to inquire into the percentage grant system which has saved the educational system from ruin during the war and has been a great factor in educational progress, though during recent years the system has been working in an abnormal atmosphere owing to the fall in the purchasing power of money."

"(8) The Government have decided not to adopt the recommendation of the Geddes' Committee to exclude children under six from State-aided schools. In large towns, where many mothers go out to work, the school is a better home for little children than the tenement or the street. There would be something greatly repugnant to human sentiment in the forcible exclusion of children under six from the elementary schools. This

would have been greatly resented in our crowded industrial cities. Sending children under six to school should be optional.

College Life in the Universities.

Sir M. E. Sadler thus writes in the *Indian Education* (for July) about the new growing plans for vast University centres with colleges as constituent elements.

The number of students in the modern Universities who live in colleges or hostels is steadily growing. In London there are plans for a University estate upon which colleges would be built in close neighbourhood to playing fields. In France the University of Paris has inaugurated the idea of a University City, which will stand on high ground, close to athletic grounds and a large park, and will be formed of a number of colleges for French and foreign students. The University of Leeds has acquired an estate upon which in future colleges will be built. Armstrong College, Newcastle, has the same aim in view. A large domain, upon which colleges can be placed, has been given to the University College at Nottingham. For the present, the high cost of building blocks this development, or rather retards it. But the demand for college life grows. It is encouraged by the example of Oxford and Cambridge. Just as in Dr. Arnold's time the training in boarding schools was appreciated by the families of the rising upper middle class and produced a new tone through corporate life, so to-day the young people from homes which have had a narrow outlook wish for the new experience which residential life at the University can give, and value the opportunities for a better disposal of the hours of the day than is possible for those who have to make long journeys morning and evening to and from the University and who thus incur fatigue by travel in train or tram car. With college life will gradually grow up a system of tutorial care and release from part of the burden of attendance at lectures which are compulsory as a form of discipline.

Secondary Education: Some Suggestions.

A writer in *The Mysore University Magazine* remarks that the current 'Science Mania' has rendered the curricula of most secondary school systems quite one-sided and neglect is being shown to the value of social studies as an equipment for work a day world men and women.

He suggests that the secondary course may be divided into two parts as follows:

The four year secondary course must be divided into two courses of two years each with two public examinations at the end of the two courses respectively. The earlier examination may be called the Lower Secondary Examination, and the later the Upper Secondary Examination. The former course must consist of a set of subjects compulsory for all students. The list of subjects may comprise—

- (1) English (including grammar, paraphrase, composition and prose).
- (2) Vernacular (the vernacular of the particular State or Province must be made compulsory, inasmuch as the candidate has generally to spend his whole life in that particular part of the country).
- (3) Elementary Mathematics.
- (4) Elementary Science (including Physiology).
- (5) Geography of the World (with special reference to the British Empire).
- (6) Indian History (with special reference to the history of the Province or State concerned).

A Handbook of Manual Training or Educational Handwork In Paper and Card-Board Modelling (in Tamil)

By S. YAGNASWAMI, Supervisor of Schools, Namakal

Book I. Price As. 8.

SRINIVASA VARADACHARI & CO., TRIPLICANE, MADRAS.

Part-passing must not be allowed in the examination, all the subjects must be equally well attended to with regard to equipment and efficiency, and the public examination must be all the six subjects.

The Upper Secondary course must have four compulsory subjects and three optionals. More attention must be paid to principles and landmarks in compulsory subjects, and to specialisation in optional subjects. In the public examination each compulsory subject may have only one paper, and each optional may have two papers; the total number of papers thus coming up to ten (the present University Entrance and Intermediate examinations have eleven papers).

He thus concludes as to the chief features of the scheme he suggests:—

Thus, the plea put forward by this article that subjects which help to nourish different faculties in boys and girls must be compulsory for all of them in the "Lower Secondary" course; that specialisation must begin only after such an examination; that while the optional grouping might continue as they are now (with some modifications as suggested above), the compulsory group must consist of subjects which help to equip the future citizen in discharging his social, political, and economic responsibilities to his country. Not merely cultural, not merely intellectual, not merely material, but also the social requirements must be provided for in our secondary course of education.

Reviews and Notices.

A NOTE ON THE DIRECT METHOD OF TEACHING LANGUAGES: BY ATMARAM SASTRI ODLAMANE.

The pamphlet presents interesting reading, both in its original Sanskrit and in Translation. To those who believe in the newness of a thing in its occidental garb, it is a welcome revelation to be told that the seers of India like Panini and Patanjali were as scientific in their treatment of language, as any present-day scientist can be. 'From Concrete to Abstract' was the method adopted by teachers of language, even in those remote days. We wish Mr. Sastri could at no distant date come out with a more elaborate treatment of the subject. What he has achieved in his short 'Note', though meagre in form, is in reality of a wide range. The wealth of learning brought to bear upon the subject is conspicuous even in the short four pages before us.

Before closing, we should like to record our mild protest against the way in which the Sloka from Kalidasa has been transliterated by the translator. In one place 'Learning' is represented as "Adhyāpana" instead of "Adyayana."

We pray with the author that "further evidence will be collected by Sanskrit scholars," on the lines of his 'Note.'

A BOOK OF VERSE CHOSEN FOR STUDENTS AT HOME AND ABROAD, BY SIR HENRY NEWBOLT. (GEORGE BELL & SONS, LTD). 2 s.

This is an anthology of exceptional merit, one that could be made only by a good poet and a poet of faultless discrimination. Every consideration of narrowing the poetic appeal in the pieces has been kept in view carefully to be avoided. In the words of the editor, "the foundation of the book will now be the humanity of it, the love of natural beauty, of natural kindness, admirations, sympathies, longings and darings, and the common experiences of life in all lands of to-day." Many

well-worn poems are found in the anthology, but what is more distinctive, numerous living poets have been drawn upon and quite the most interesting section is perhaps the work of Sir Henry Newbolt himself. His "Ballad of Sir Pertab Singh" narrating an incident of 1903 seeks harmony between East and West in the same strain like Kipling's lines (also found in the anthology):

But there is neither East nor West, Border nor Breed, nor Birth,

When two strong men stand face to face, tho' they come from the ends of the earth.

There is a good number of pieces reflective of childhood, the well-worn songs of Blake and many others from the work of living poets. There are poems which speak of man's duty and ideals in the most universal terms, there are little things enshrined in prettiest poetry, there are the spirited bits of patriotism, little idylls of simple and poetic life and brilliant imaginative pieces like Coleridge's "Kubla Khan." Of living poets, ten little pieces from Walter de la Mare are quite perfect gems. Once in a way we are also treated to lines of a different character:

When the tea is brought at five o'clock,
And all the neat curtains are drawn with care,
The little black cat with bright green eyes
Is suddenly purring there.

These lines are perhaps indicative of a new-born in poetry, the consequence of a too courageous faith in poetic possibilities. But the bulk of the present anthology offers no room for questions of any kind. It embodies the best of recent years, illustrating the precious and sumptuous work belonging to them. One notes also the correction of old errors as when the lines, beginning with "Sound, sound the clarion" are correctly attributed to Thomas Osbert Mordaunt. Altogether we have here an excellent "up-to-date" anthology of poetry worthy of universal use and appreciation.

* **ENGLISH INTONATION WITH SYSTEMATIC EXERCISES,** BY HAROLD E. PALMER. (W. HEFFER & SONS, LTD., CAMBRIDGE). 1922. 5s. *nd.*

The author of the volume before us needs no introduction to language students who are already acquainted with his previous publications. In this, his latest work, he deals with the question of English Intonation. While the importance of intonation in a language like the Chinese or the Bantu is sufficiently recognised, it is doubtful whether its importance in English has been adequately appreciated. The single word "yes" may imply three or four different answers according to the tone which accompanies it and Mr. Palmer has given us other instances, where the sounds may be the same, but signify different ideas according to their intonation. The Science of *Tonetics*, as it has been called, is come to stay and we warmly commend the volume before us to all lovers of English.

* **THE HYGIENE OF THE SCHOOL CHILD,** BY LEWIS M. THERMAN. (PUBLISHED BY HARRAP). Price 10/6.

An efficient teacher should know something as to the fundamental principles of child hygiene, and school-house hygiene. Unfortunately, however, we have only recently come into possession of such knowledge, and most of it is still locked up in medical and psychological journals and books.

The above book, therefore, which is an attempt to digest and interpret this recently-accumulated knowledge and place it in usable form is especially welcome, dealing as it does so largely with the fundamental facts of a child's physical development.

The time when the preparation of teachers can be made by a study of psychology and methods ought to pass. When it does, it will mean that the health and physical welfare of a child will then be regarded as of equal importance with Arithmetic and Geography, and then a knowledge of the elements of child-hygiene will be regarded as of fundamental importance in the training of every teacher. To-day when there is so much talk about the change in education, such a book should come with special significance.

Relating as it does to the scientific researches relating to growing children, it should prove of much interest and value not only to the teacher, but to that large and increasing number of parents who are interested in the proper rearing and education of their children.

* **THE WORLD OUTSIDE,** BY R. K. AND M. I. R. POLKINGHORNE. (PUBLISHED BY HARRAP).

Every teacher is, or should be, acquainted with *Toy-making* by the same authors. The book under review is an extension of the same book and will be welcomed by all who have the welfare of their children at heart.

School to the child is a place for lessons. Geography is so many printed pages, most easily learnt when the map is on the opposite page; to how many of us Europe is but a map. We cannot see the mountains, the rivers, the wonderful buildings, the quaint houses, the rugged coast. Handwork might have visualised these. The modern child, if his teacher is a good one, will find it hard to grow up so ignorant, for with books like this one, the world becomes a living thing.

Toy-making in itself is an education; but the application of it to life in other lands gives it a further value in enlarging the outlook of the child, and giving him a fellow-feeling for people living in different surroundings. The old psychology taught us that all higher knowledge grows out of the immediate cognitive contact with the outer world which we gain through the senses. Modern psychology insists that the basis is really wider than this; that it includes not only sensation, but also the muscular movements which sensations provoke through feeling. That is why practical work is of so great importance in teaching children. The joy of 'doing' makes many tasks become play when the child is pursuing some activity for its own sake.

Every teacher should therefore obtain this book so that he might be able to bring some of this 'joy' of doing to the children in his care.

The days that make us happy make us wise.

* Indian Agents: P. T. I. Book Depot, Bangalore.

* **BOYHOOD STORIES OF MASTER-PAINTERS AND MUSICIANS,** BY KATHERINE DUNLAP CATHER. (PUBLISHED BY HARRAP).

Miss Cather is known to every teacher of young children as the most delightful story-teller of their time and it is always a delight to get a new book of stories from her pen.

Times without number we have advocated the cause of story-telling as the most useful ally in the education of the child. There are many books of stories in the market to-day, some of them good, many of them bad, and most of them mediocre. Miss Cather's books are among the good, and should form a welcome addition to the library of every teacher and elementary school. As is usual with the books brought out by Harrap, this one is excellent; we recommend it to all.

* **WILLIAM BLAKE AND HIS POETRY,** BY ALLARD-DOVE NICOLL M.A. (PUBLISHED BY HARRAP).

It happens in our schools and colleges that poetry is a subject which is not of very great interest to our students, many of them cannot understand it and few if any have an appreciation of it. The reason for this seems to be that among the vast majority of young students, a living interest in the work has not been aroused; and this can only be done intelligently when it is immediately associated with the character and career of the poet himself. In the earlier stages of studying poetry, it is most valued and loved when it is made to seem most vital and human; and the human and vital interest of poetry can be most surely brought home to the reader by the biographical method of interpretation.

This is the purpose of the volume under review which we understand is to be one of a series, and which should be of very great value to the Indian student and the teacher of Poetry in the school and the college. Biography and production are considered together and in intimate association, and the reader is thoroughly interested from beginning to end. We would recommend it to every teacher and student of literature, as well as to the general lover of English Poetry.

* **READINGS FROM THE BIBLE,** BY B. L. K. HENDERSON AND F.G. RUSSELL. (PUBLISHED BY HARRAP).

The Bible has been a well-spring of English literature from the year 1611 to our own time, and many of our great writers have acknowledged the literary debt owed to the constant reading and listening to pieces taken from the Scriptures.

In India there are those who feel a prejudice at the very sight of the binding and appearance of the Bible for various reasons. To these people and their children much magnificent literature is for ever hidden, but in an anthology such as the one before us, which looks like an ordinary book that one might read every day and which contains selections free from any association of doctrine or dogma, all may become acquainted with the grand yet simple diction that has awakened responsive music in the hearts and minds of so many of the world's great writers.

Messrs. Harrap are to be congratulated in their far-sightedness in bringing the book into India, and we recommend it to all our readers.

* Indian Agents: P. T. I. Book Depot, Bangalore.

The Educational Review.

We are glad that strong condemnation was expressed at the last meeting of the Madras Senatè, of the introduction of communal principles in the matter of admission into colleges. The Selection Committees evolved out of the wisdom of the Ministry of Education, have already become notorious for the injury they are causing to education by depriving those best qualified for education of the facilities to which they are entitled and placing obstacles in the path of the educationally progressive caste in its onward march. If the Ministry of Education had really discovered that Non-Brahmin young men have been prevented from gaining admission because of their belonging to a backward caste, one could understand the need for organisations of the kind which have unfortunately come into existence. But a deliberate attempt is being made to penalise a progressive caste and instances have been brought to notice of better qualified people being refused admission in favour of those whose academic record has been distinctly inferior. We are not surprised that Mr. Satyamurthi's resolution found a large measure of support including that of some of the European members present at the meeting and we hope the Selection Committees will soon be given a decent burial. Time was when the Government in England imposed disabilities upon Catholic children and denied them the educational facilities open to other members of the commu-

nity. England now knows better and the young men of all communities can compete on absolutely equal terms. Catholic and Protestant, Jew and Non-Christian can all expect the facilities which the civilised State affords to the youth of the country. But the present Government of Madras in its 'transferred' departments is of course democratic only in name and is based on foundations of injustice to an unfortunate minority and it is no use exhorting it to follow the way of other civilised governments. If the present Minister of Education in Madras were an academic man, which unfortunately he is not, he would have known that the true ideal to be followed in educational matters was one based entirely on considerations of merit, but it is obviously difficult with his present limitations to make him realise the truth.

We have deferred a detailed consideration of the draft bill of the Madras University Bill, as it raises many questions of importance, including one which does not seem to have received much attention, the attempt underlying it to capture the University and subject it to the political game on a communal basis which is now being played by certain departments of the Government of Madras. In the proposed introduction of a large non-official lay element and in the contemplated appointment of a paid Vice-Chancellor, there is the danger of the University ceasing to be academic and being used to further the campaign

of caste-hatred now carried on by one section of so-called 'democratic' people. Apart from these there are a number of other directions in which the same purpose is evident. On purely educational grounds too, it is interesting to note that the draft bill did not meet with the approval of the Senate of the Madras University and it passed a Resolution approving of the principle of the Bill in an amended form which almost amounts to a recommendation to shelve the matter. The Senate suggested that the unitary and residential University should come into existence in Madras only when similar Universities come into existence at other centres in the Presidency, like Trichinopoly, Rajahmundry and some suitable centre in Malabar. As has been pointed out by many a critic in the press, no guarantee has been forthcoming that the financial support necessary for effecting the reform will be forthcoming. It is reasonable to argue that in the absence of enormous sums of money, for which there does not seem to be any chance in view of the present depleted finances of the Presidency, it is not possible to establish a really high-class teaching and residential University in the city of Madras and there can be no satisfaction in the mere passing of a legislative enactment however much it may count to the credit of a political party. If the re-constituted University is not to have any appreciable addition to its resources and the passing of the Act should only mean the provision of a well-paid appointment as Vice-Chancellor to be

disposed off to some favourite of Government, and there is to be nothing else, one had better not have any reconstitution at all, though we should like to reserve our criticism of the Bill to a later stage.

In the present regrettable adoption of the principle of communal distinctions in educational administration and even in such purely academical matters as the fitness of students to be enrolled as members of colleges, the Hon. Mr. A. P. Patro, the official head and protagonist of the policy, may derive some consolation in the fact that he is erring in the company of a brother-minister of another province, the Punjab—if that will give him some satisfaction. Mr. Fazil Hussain, since becoming Educational Minister under the Reforms which now seem to be disillusioning even the Liberals and Moderates, has been carrying on a communal crusade, thoroughly inconsistent with all principles of democracy, not to speak of the best educational opinion. In his anxiety to confer educational facilities on the backward Muhammadan community, he has been the cause of making things very difficult for the Hindus who are educationally the more advanced in the Province. The policy has been the subject of severe criticism in the press of the Punjab and matters have just now reached a head as the following telegram of the Associated Press which has appeared in the papers will show:—

Communal
Troubles in
Madras and the
Punjab.

'Eighteen out of the 20 Hindu members and eight out of the 18 Sikh members of the Punjab Legislative Council have sent a representation to the Governor of the Punjab raising some constitutional points and pointing out certain defects in the working of certain transferred departments—the defects which, they say, have come into prominence since the introduction of the Reforms Scheme—adding that the system of representative government should not be allowed to degenerate into one causing communal rivalry or hatred by giving undue advantage to a community in majority over the communities in minority. The signatories state: 'It would be a travesty of representative government if a Minister supported in the Council by a majority, consisting mainly of one community, frames a policy, prejudicial to the interests of the minorities. There are certain orders of the Hon. the Minister for Education which have created a serious discontent among the non-Muslim communities. We enumerate some of them below—(1) the order introducing communal representation in admissions to the Medical College and the Government College, in place of the former rule which regulated the admission solely on merit; (2) the orders dispensing with the services of non-Muslim Temporary Assistant Surgeons without regard even to the military service of some of them; (3) orders as to appointments, permanent and officiating, in the Education Department.'

Proceeding further the signatories say: 'Whether there is any justification or not for fixing the percentages on a communal basis for recruitment in the public services, we strongly protest against allowing the rule of communal proportions to govern admission of young men to educational institutions. We therefore earnestly request that this order of the Hon. the Minister which carries the questionable principle of communal divisions to absurd lengths and which violates flagrantly the letter and the spirit of His Majesty's instructions for the faithful carrying out of which Your Excellency alone is responsible, should be can-

celled forthwith, and suggest that a Board of four non-official members of the Council be appointed consisting of a Hindu, a Muhammadan, a Sikh and a Christian, with one European official to examine the cases of all the officiating and permanent appointments made, with a view to ascertain if these involve any unjust suppression of existing incumbents in the various grades of service, in order to report to the Governor that deserving men already superseded should no longer be superseded and should get officiating or permanent appointments at the earliest opportunity.'

In conclusion the signatories state: 'In the Punjab we have failed to observe any freedom given to officials as to the manner in which they should vote. Numerous instances could be given from the Council proceedings which would convince Your Excellency that officials have no freedom of speech or vote. The controversy carried on in the newspapers with regard to the policy of the Minister for Education must have come to Your Excellency's notice. It is necessary to make a thorough enquiry into the matter. The Board that is proposed will be quite independent and free from communal bias and we give expression to a hope that Your Excellency will receive and consider this representation in the spirit in which it is conceived and presented.'

With the present docile non-Brahmin majority in the Legislative Council willing to raise its hands of approval at the bidding of the party in power, the Minister in Madras may not have to face a similar unenviable situation, but we are afraid there is not much to choose between the two gentlemen and if these are the fruits of the Reforms in Education, one is led 'furiously to think' whether we may not trace some steps backward to a situation when there was probably more of 'officialism,' but there

was undoubtedly less of this tyranny towards minorities and parties not in power!

While the tendency in all parts of the country has been in the direction of the wider use of the Vernacular as

a medium of examination and instruction, Bombay seems to be obstinate in its resistance to the movement. At the last meeting of the Senate of the Bombay University, a resolution was brought in to allow students at the Matriculation examination the option of answering their papers, except in English, either in English or in the Vernacular. The proposed reform was a very modest one, experimenting on the desirability of the greater use of the Vernacular in High School education, but even this was too much for the Bombay Senate and the resolution was rejected. The suggestion emanated from the Minister of Education and was warmly supported by the prominent official representatives but all that was of no use. We are afraid the Senate was unnecessarily nervous in thinking that this will mean a very effective set-back to English. No such catastrophe could have occurred inevitably and the Senate could certainly have taken precaution to see that such a thing did not happen. Sir C. H. Setalwad, the Vice-Chancellor, devoted a good part of his address to combat the 'Vernacularists' as he called them. We have always considered it necessary in the interests of the country that the position of English should not become less im-

portant in the educational system, but that position is not inconsistent with the wish for the gradual development of the use of the vernacular in the work of education. We are glad however that Sir Setalwad made it clear that he was for the advancement of the vernaculars and dwelt with pride on the recent achievements in Maharathi and Guzerathi. It is a great mistake to think that a person who is sceptical about the feasibility of using the vernaculars in India to-day as instruments of instruction in the higher stages has no love for the vernaculars or is not anxious for their progress. Often he is and he probably knows more sometimes of the vernaculars themselves than some of the ardent champions of their use as media of instruction.

Dr. Vogel, the eminent Orientalist in Europe, has put forward the suggestion that there should be a British School of Oriental Studies in India, somewhat on the lines of the British School of Archaeology in Athens. It is well-known that the activities of the latter institution have resulted in considerable additions to the world's knowledge of the history of ancient Greece and Dr. Vogel's appeal is for similar work by British students of Oriental subjects in India. It is suggested that the scholars should spend about six months in the year at Simla in view of its climatic and other advantages and the remaining six months in Benares and in Southern India, a group of scholars

British School
of Oriental
Research in
India.

studying texts and manuscripts in the former place and another group of scholars exploring the archæological monuments of Southern India. The problems connected with Oriental scholarship are so many and the work awaiting the student of research is so great that India should be glad to welcome the co-operation of all people who are willing to lend a helping hand. Dr. Vogel is not unaware of the difficulties at present of securing sufficient financial support for the scheme, but it is not improbable that as soon as the present abnormal conditions disappear, the idea may materialise, seeing that it has the approval of such a distinguished Orientalist as Dr. Vogel.

In connection with the present controversy about the Premier's speech on the position of the Imperial Services in India, and his thoughtless remarks on the desirability of keeping a substantial proportion of Europeans in the services, like the essential steel frame-work of a building, it is necessary that we should state the feeling of all lovers of education in the matter, as far as the Imperial Service in education is concerned. If the recruitment of Europeans for the Indian Educational Service should stop to-morrow, as we are constantly threatened it would, in spite of the periodical announcements of new hands arriving in India, we have no hesitation in saying that the work of education in the country can be carried on without any difficulty and there will

not be the slightest trouble except from the 'Die-hards' in England anxious to perpetuate racial preference and the preservation of vested interests. If intrinsic ability was the only test and if the sons of the soil had not been kept down merely because of their being Indian by birth, a good part of the present number of European members of the Indian Educational Service could never have been chosen for the offices at present held by them. We would go a step further and say that not only will there be no difficulty in recruiting for the services entirely from Indians in the future, it is also possible, if challenged, to replace almost the *bulk* of the Europeans in the service *at once*, by equally efficient if not by superior Indians. On a close scrutiny it will be discovered that it would be absolutely necessary to keep only a handful of Europeans. In some of the Presidencies, it would be difficult to find even two or three who cannot be spared at all. Preference for race or for mere British degrees which is only a relic of the other will soon be a thing of the past and the earlier the consummation, the better for the work of education in India.

The average Indian educationalist is unfortunately of a very docile temperament and is quite willing to allow himself to be ridden upon by the boisterous politician or the bureaucratic official, both of whom have no hesitation at least in India, to pose as educational

experts. We are therefore glad that the Senate of the Calcutta University is putting up a brave fight with the Minister of Education and the Legislative Council in the Province for the recognition of the principle of autonomy of Universities. The report of the Committee appointed by the Senate to consider the speech of the Minister on the affairs of the Calcutta University is a valuable document arguing against the interference of official authority with academic independence. We wish our educational friends always realised the spirit underlying the following extracts from the report, in their dealings with non-educational authorities who are not loath to interfere with academic independence whenever possible:—

It is plain that, except upon questions of change of Regulations, and the affiliation and disaffiliation of Colleges, and a further matter presently to be mentioned, the Senate, composed of the Chancellor, Vice-Chancellor and Fellows, is constituted a self-contained Corporation and is vested with the entire management of and superintendence over the affairs, concerns and property of the University and no interference on the part of the Government, much less of any member thereof, is permissible. In this connection, it may be pointed out that the Senate is under no legal obligation to furnish reports, returns or other information. Reference may be made to Section 23 of the Indian Universities Act which makes it obligatory upon every affiliated College to furnish such reports, returns and other information as the Syndicate may require to enable it to judge of the efficiency of the College. No power, however, is reserved to the Government to call for reports, returns and other information from the Senate. The reason for this will be obvious to all persons familiar with University administration. There are many matters connected therewith, specially with the conduct of examina-

tions, which no University should be called upon to disclose. We do not suggest, however, that because the University is not under a legal obligation to furnish reports, returns and other information, it should necessarily decline to do so. Much may be and is gained by publicity in suitable cases, but what should be distinctly understood is that such information cannot be demanded as a matter of right.

The next important point which deserves consideration is one of the procedures to be adopted when the Government deals with a University matter which is within its jurisdiction. It is obviously undesirable that a person in the position of a responsible Minister should give public expression to opinions upon University questions which the University authorities themselves had not been previously given an opportunity to examine and consider. The contrary procedure is bound to lead to unhappy results. A Minister cannot always be expected to possess an intimate first-hand acquaintance with the various aspects of the manifold and complex problems which must arise in a great and progressive University. If the Minister were to form his opinion on such materials as might be available to him, he might sometimes come to erroneous conclusions; and the public expression of opinions so formed might lead to complications which all persons interested in the welfare of the University should be anxious to avoid. That this apprehension is not altogether unfounded, may be illustrated from some of the observations contained in the Minister's speech.

Our conclusion is that the facts and arguments set out above amply establish that there was no justification for the attack on the University, while many of the comments were clearly without jurisdiction. Thus the University is advised "to give up its present policy of needlessly irritating the Council on matters financial," "from higher and patriotic self-interest at all events" and it is assumed that if the Vice-Chancellor "makes up his mind, things will be easy in the Calcutta University." We are of opinion that the University has furnished no occasion for the alleged irritation, and we

may add without impropriety that the decision of matters in difference, if any, between the University and the Government does not rest with the Vice-Chancellor individually, as is supposed, but with the Senate as the Body Corporate. Apart from this instance, there are other matters in the speech which make it impossible for us to close without reference to its tone and language, which we regret to state, cannot but be deemed unfortunate. It is perhaps not always realised that members of an academic body, who have devoted long years to the service of the University and are intimately acquainted with the various phases of its development as also with the details of its administration, are not likely to be impressed by advice, given with an appearance of authority, though not well-founded on reason,—however exalted the position of the critic. There is plainly no occasion to "forgive and forget," nor is there any need to place this University "once more on the same high pedestal which it had occupied in the past,"

when one bears in mind that it has been readily acknowledged by critics, competent and impartial that this University still occupies the foremost place amongst the Universities of India as a Teaching and Research institution. We do not hesitate to maintain that this is not a case of "doles" to be given by way of accidental charity or compassion. Persons responsible for the development of the University have for years past strenuously worked in its best interests, often amidst the most discouraging circumstances, without that measure of aid from the Government which was legitimately its due. It is now the turn of the custodians of the public funds to recognise their duty and to fulfil their obligation in a befitting manner, for the spread of true University education amongst the people of this province.

In this fight for the recognition of the autonomy of Universities, Calcutta should have wide support all over India

BOMBAY UNIVERSITY EXAMINATIONS.

School Final 1923.

MATTHEW ARNOLD: SOHRAB AND RUSTUM, with Introduction and Notes, by Mr. T. O. Hodges, B.A., Professor of English, Presidency College, Madras ... 1 0

B.A. 1923 and 1924.

SHAKESPEARE: MACBETH, with Introduction and Notes, by the Rev. J. Morrison, M.A., D.D., formerly Principal and Professor of English, General Assembly's Institution, Calcutta (College Classics) ... 1 6

—: MIDSUMMER NIGHT'S DREAM, with Introduction and Notes, by the Rev. R. Scott, M.A., Professor of English, Wilson College, Bombay (College Classics) ... 1 6

—: JULIUS CÆSAR, with Introduction and Notes, by Mr. Mark Hunter, M.A., Prof. of English, Presidency College, Madras (College Classics) ... 1 12

—: TWELFTH NIGHT, by Mr. Michael Macmillan, M.A., D.Litt., I.E.S. (Retired) English Lecturer in the University of Birmingham (Formerly Principal and Professor of English, Elphinstone College, Bombay) ... 1 12

SHELLEY: ADONAI, with Introduction and Notes, by Mr. W. E. Hoare, M.A., formerly Principal, Doveton College, Madras ... 0 10

MILTON: LYCIDAS, with Introduction and Notes, by Mr. N. Vaidyanatha Iyer, M.A., formerly of the Teachers' College, Saidapet ... 0 6

TENNYSON—GUINEVERE, with Introduction and Notes, by Mr. E. H. Elliot, B.A., formerly of the Presidency College, Madras ... 1 4

—THE TWO VOICES, with Introduction and Notes, by the same Author ... 1 4

M.A. 1923 and 1924.

SHAKESPEARE: OTHELLO, with Introduction and Notes, by Mr. Michael Macmillan, M.A., D.Litt., formerly Principal, Elphinstone College, Bombay (College Classics) ... 1 6

CHAUCEER: PROLOGUE, with Introduction and Notes, by Mr. W. J. Goodrich, M.A., formerly Principal, Pachaiyappa's College, Madras ... 1 2

—THE KNIGHT'S TALE, with Introduction and Notes, by the same Editor. ... 1 2

SRINIVASA VARADACHARI & CO., TRIPLOANE, MADRAS.

ENGLISH CLASSICS

Abridged and Adapted for use in Indian Schools.

In each case the editorial work has been done very carefully, the text having been abridged by omission of passages of secondary interest. Further, wherever it has been found necessary, obsolete words and expressions have been replaced by their modern equivalents.

Gulliver's Travels, edited by Egerton Smith, M.A., I. E. S., Professor of English Literature, Dacca College. Price, Re. 1.

Robinson Crusoe, edited by Egerton Smith, M.A., I. E. S., Professor of English Literature, Dacca College. Price, Re. 1-4.

Vicar of Wakefield, edited by J. C. Rollo, M.A., Professor of English, University of Mysore. Second Edition. Price, Re. 1.

Lorna Doone, edited by F. R. Tomlinson, B.A., I.E.S., Professor of English Literature, Government College, Lahore. Second Edition. Price, Re. 1-4

Pride and Prejudice, edited by Ferrand E. Corley, M.A., Professor of History, Madras Christian College, Fellow of the University of Madras. Price, Re. 1-4.

Bride of Lammermoor, edited by H. Martin, M.A., Principal, Islamia College, Peshawar. Price, Re. 1-8.

Hajji Baba of Isphan, edited by H. Martin, M.A., Principal, Islamia College, Peshawar. Price, Re. 1-8.

A Book of Golden Deeds, edited by Egerton Smith, M.A., I. E. S., Professor of English Literature, Dacca College. Price, Re. 1-4.

Tanglewood Tales, edited by P. E. Richards, B.A., Professor of English Literature, Islamia College, Lahore. Price, Re. 1-6.

COOPER—Publishers—BOMBAY.

UNIVERSITY OF MADRAS.

Intermediate Examination, 1923. B.S. A. P.	
GRAY—ELEGY AND OTHER POEMS, with Introduction and Notes, by E. E. Kellett, M.A.	0 12 0
TENNYSON—MORTE D'ARTHUR, with Introduction and Notes, by E. H. Elliot, B.A.	0 12 0
ODE ON THE DEATH OF THE DUKE OF WELLINGTON, with Introduction and Notes, by E. H. Elliot, B.A.	0 8 0
MATTHEW ARNOLD—RUGBY CHAPLAIN AND THE FORSAKEN MERMAN, with Introduction and Notes, by E. H. Elliot, B.A.	0 8 0
ADDISON—SELECTIONS FROM THE SPECTATOR, with Introduction and Notes, by E. H. Elliot, B.A. (Coverley Papers, &c.)	1 12 0
* Both the books together Re. 1.	
Shakespeare—Richard II, with Intr. and Notes, by Prof. J. C. Rollo, M.A. Mysore University.—In the Press.	
Intermediate Examination, 1924.	
MILTON—L'ALLEGRO AND IL PENSEROSO, with Introduction and Notes, by A. J. Griev, B.A.	0 10 0
WORDSWORTH—SELECTIONS CONTAINING RESOLUTION AND INDEPENDENCE, AND OTHER POEMS, with Introduction and Notes, by E. H. Elliot, B.A.	0 12 0
TENNYSON—SELECTIONS containing MORTE D'ARTHUR, OENONE, ULYSSES, AND SIR GALAHAD, with Introduction and Notes, by E. H. Elliot, B.A.	0 14 0
TENNYSON—LOTOS-EATERS, with Introduction and Notes, by E. H. Elliot, B.A.	0 4 0
POEMS, containing MORTE D'ARTHUR and ODE ON THE DEATH OF THE DUKE OF WELLINGTON, OENONE, ULYSSES, THE LOTOS-EATERS, AND SIR GALAHAD. Red Letter Library. Cloth bound. Reduced to	0 12 0
B.A. Degree Examination, 1923	
MILTON—COMUS, with Introduction and Notes, by Dr. S. Sathianadhan, M.A. 2nd edition	0 12 0
CARLYLE—HERO AS MAN OF LETTERS, with Introduction and Notes, by E. E. Kellett, M.A.	0 12 0
SPENSER—PROTHALAMION, with Introduction and Notes by E. H. Elliot, B.A.	0 10 0
LESLIE STEPHEN—JOHNSON. English Men of Letters Series. Paper cover	0 9 0
Cloth	0 13 0
CARLYLE—HERO AS POET, with Introduction and Notes, by the Rev. S. Gnana-muthu, M.A.	0 8 0
B.A. Degree Examination, 1924.	
SPENSER—PROTHALAMION, with Introduction and Notes, by E. H. Elliot, B.A.	0 10 0
MILTON—COMUS, with Introduction and Notes, by Dr. S. Sathianadhan, M.A. 2nd edition	0 12 0
POPE—RAPE OF THE LOCK, with Introduction and Notes, by E. E. Kellett, M.A.	1 0 0
BROWNING—SAUL, with Introduction and Notes, by C. H. Payne, B.A.	0 12 0
*WORDSWORTH—SELECTIONS, containing Ode Revisiting the Wye above Tintern Abbey, Ode to Duty and other poems, with Introduction and Notes, by E. H. Elliot, B.A.	0 14 0
*WORDSWORTH—SELECTIONS, containing ODE ON INTIMATIONS OF IMMORTALITY, and another poem, with Introduction and Notes, by E. H. Elliot, B.A.	0 12 0
CARLYLE—HERO AS MAN OF LETTERS, with Introduction and Notes, by E. E. Kellett, M.A.	0 12 0
* Both together Re. 1-4-0.	
Other Intermediate and B.A. Books.	
INTERMEDIATE GEOMETRY (Theory and Practice) by M. Satyanarayana, M.A., L.T., and K. S. Patrachariar, M.A., L.T. 2nd and Revised Edition	2 8 0
THE STUDENT'S COMPANION TO GEOMETRY, for the Intermediate Examination of the University of Madras, under the New Regulations, by K. Deva Rao, B.A., L.T.	0 8 0
EXAMPLES ON TRIGONOMETRY, containing the F.A. Trigonometry Papers for 15 years, 1888 to 1902, with Solutions of all the Problems, by P. A. Subramania Aiyar, B.A., L.T.	0 8 0
EXAMPLES ON ALGEBRA, containing F.A. Algebra Papers for 17 years, 1889 to 1905, by the same author	0 8 0
INTERMEDIATE CHEMISTRY, by P. Lakshmi Narasu, B.A., Professor of Physical Science, Pachaiyappa's College, Madras.	3 8 0
INTERMEDIATE PHYSICS, by the same author.	4 0 0
LECTURES IN LOGIC, by Rao Bahadur S. Mangesh Rao, B.A.	2 8 0
STUDENT'S HAND-BOOK OF PSYCHOLOGY, by the late Dr. S. Sathianadhan, M.A., LL.D. (2nd Edition)	1 0 0
QUESTIONS AND ANSWERS ON ELEMENTARY LOGIC, by M. Macmillan, M.A.	1 0 0
THE ELEMENTS OF HUMAN PHYSIOLOGY, by G. S. Ramasami Aiyar, B.A.	1 0 0
B.A. EXAMINATION ENGLISH LANGUAGE, LITERATURE AND COMPOSITION PAPERS of 1881 to 1906 (both inclusive)	0 5 0
F.A. MATHEMATICS—ALGEBRA AND TRIGONOMETRY PAPERS, with Solutions and Notes from 1901—1903, by B. Hanumantha Rao, B.A.	0 4 0
MINTO'S LOGIC—INDUCTIVE AND DEDUCTIVE, 5th Impression, Rs. 3-6-0 Reduced to	2 4 0
ROBINSON—SHORT HISTORY OF ROME—Rs. 2-10-0. Shop soiled, reduced to	1 0 0
FAWCETT—MANUAL OF POLITICAL ECONOMY. Rs. 9 0-0. Reduced to	4 0 0

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

The Educational Review

A Monthly Record for India.

VOL. XXVIII.]

SEPTEMBER 1922.

[No. 9.]

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

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

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

INDIAN HISTORICAL RESEARCH AND ITS IMPLICATIONS.*

BY

PROF. S. KRISHNASWAMI AYYANGAR,
M.A., Hon. Ph.D.

THE term "research" means an investigation conducted with a view to ascertaining the actual facts in regard to a particular point under discussion and their correct relation to one another. It therefore naturally falls into two parts at once: first, the ascertainment of the actual facts, and second, an examination of their relative position in regard to one another. Where, therefore, the investigation is undertaken in the field of Indian History or for the matter of that, of any history, the distinct characteristics of these two departments of the investigation have to be clearly kept in view. The ascertainment of facts may be carried many

degrees closer to truth, while the setting out of these facts in their actual relationship may reach a degree of approximation, not amounting to the same degree of certainty as in the case of the facts referred to above. In other words, investigation as to facts and their ascertainment allows of a greater degree of agreement and admits of greater proof than the ascertainment of the relations between facts where there can be a considerable difference of opinion. Even so, research in history, either in the one or in the other of its two sections cannot reach the degree of certainty that is possible in the experimental sciences for two reasons. Historical facts are the result of the operation of forces which have a conscious agent behind them, whereas the facts of physical sciences do not labour under this particular defect. Ascertained relations can be demonstrated by experiment in the case of the latter and no experiment is possible in the case of the former, even in respect of the simplest facts or their

* The Inaugural Address before the Senior Historical Association, Teachers' College, Saidapet.

relations. Hence, even as an approximation to truth historical research has reference to approximations which cannot be held to go as far as the facts of the experimental sciences. This is the first fact to be borne in mind.

It follows from this particular feature that in regard to the facts of research the result achieved may be very close to truth indeed, but in the arrangement of these facts for any particular conclusion that they may lead to a certain amount of elasticity is possible and therefore there is room for a considerable difference of opinion. It is possible therefore for different investigators to draw different inferences from the same series of facts and the actual correct inference in the circumstances would depend a great deal upon the judgment of those who have to consider the investigation as a whole and form an opinion of their own. It, therefore, depends upon the impression that an investigator's statement of his case produces upon those that read it. A student of research therefore has to present his case not as an advocate does his in the interests of his particular client, but with the impartiality of a judge summing up the case to the jury for leading them to the correct judicial verdict. In other words an investigator has to consider his side and the other possible sides to a particular question and arrive at his conclusions very much more as a judge does than as an advocate presents it. This calls for criticism, criticism in the proper sense of the term, a review of the evidence upon which a conclusion rests both with respect to the correct ascertainment of the facts and their setting in their right relationship to one another. Criticism therefore is of the essence of historical research and the first essential to that research is to be able to

criticise and be criticised without animus or bias. Even criticism therefore has to be impartially judicial, and temper has necessarily to be put out of the question altogether.

Research may therefore be conducted in an investigation, such as was pointed out above, of facts and their relations in regard to established conclusions, or in the investigation of new facts and the ascertainment of the relations between them with a view to arriving at conclusions. In either case, the actual educational value, the mental discipline, is the same. In either case, you are gradually led to arrive at conclusions warranted by the facts without any bias in the matter. Such an impartiality and freedom from bias can be attained for ordinary human beings only in respect of facts in which they can have no personal interest. Even so, it is difficult to abolish prejudice altogether one way, or the other even in respect of the ascertainment of historical facts and their relations. But, nonetheless, the discipline provided is excellent and the result is a judicial frame of mind and an evenness of temper, the invaluable attributes of a cultured man. Thus the educational value of research and the value of a mind thus attuned in practical life could easily be appreciated by all those that have to do with men and women of various kinds of disposition swayed by various interests in actual life. A mind so disciplined develops an outlook of a peculiar kind upon facts and views that may be presented to it, quite distinct from that of minds that had not had the benefit of this kind of discipline. This is the great value of historical research as an educational subject and this feature of it has to be borne in mind when you are confronted with

the question: What is the use of research work in the curricula of an educational system? Research in Indian History calls for these high qualities, quite as much as research in any other history, and in its present state calls for other qualities which might not be requisite in the same degree, or even in the same volume, in other departments of historical research, say research in Modern History of Europe. By research in Indian History I am referring to periods of Indian History anterior to the quite modern or say, more or less of the so-called British period of Indian History; not that I consider the study of the British period of Indian History is not educationally good or is not interesting or does not call for the great qualities of mind that the other does. It is none of these. There is a radical difference in character between the kind of material that has to be worked up for the one and for the other. There may be considerable similarity between the Muhammadan and the British period in this respect distinguishing both alike from the Hindu period. All the same, however, if Indian history is to be understood as the history of the Indian people, a great deal more than the history of the ruling dynasties, the similarity between the Muhammadan and the British periods may not be so great and the actual similarity between the Muhammadan and the Hindu periods may be considerably greater. Anyhow, it will not do prejudice to the subject of the lecture to make this distinction. In a historical investigation conducted in regard to any particular epoch or topic of Indian History, the general character of the material with which the investigation has to be conducted must be carefully considered and the value of each particular section

of it properly appraised. Taking, therefore, any period of comparatively early Indian History as illustrating the position better, you find at once that the position of the historical investigator is complicated by the varying character of the material upon which he has to base his investigation. These fall into a number of classes each distinct from the other, and each of them calls for specialised qualifications for carrying on actual work in it. There is the Archæologist with his spade and pick, who claims that his work is the soundest and the most dependable for this purpose. Next follows the Epigraphist with his lamp-black and brush and books to copy and to read inscriptions unreadable by the ordinarily educated man and offers his own interpretations of these inscriptions. Then comes the Numismatist, who studies coins, their character and material make-up, and reads the devices and legends on them giving his own interpretation of these. Next come the Architect and the Iconographer, who are fast separating themselves from the Archæologist, each claiming to be unerring in his judgment as to the classification of his material, and their relative position in a line of evolution and in his inference in regard to the general character of the people whose handy-work *their* subjects for the time being happen to be. Then comes the critical scholar with his books and manuscripts of various kinds and with his mind well-stored with "old saws and modern instances" on every conceivable point that may turn up in literature. It is just possible that in regard to any particular topic all these might agree, at any rate converge towards the same conclusions; but as it does happen these differ more often than not. It is the function of the historian sitting

in his study to follow up the investigation of each of these with sufficient knowledge, and judiciously appraise the value of each as bearing upon the particular topic and ascertain the result from the combined evidence of all these, a position which calls for the exercise of the faculty of judicious appreciation of values to a very high degree. As was stated already each one of these special sections calls for specialised study and even somewhat distinct faculties of the mind for successful work. But the historical investigator must combine all these, it may not be to the high degree of specialisation in respect of each, but still with a sufficient degree of familiarity and knowledge to set the proper value upon the achievement of each. It will therefore be invidious to institute any comparison in respect of the value of each of these as contributory to historical truth.

It will be seen readily that, as in the case of specialists generally, each one of these claims superiority to the rest. The Archaeologist who conducts his investigations by making excavations on important historical sites and explores the region recording carefully every step of his work by descriptive writing and what is more by mechanical copies by means of photographs, recording each one of the details with all the fulness necessary for proper appreciation. As he turns up layer under layer he takes care to tell you what exactly is the character of the vestiges of human civilization that he turns up in each particular layer, arranging these layers in order from top to bottom and indicating the relative age of each particular layer. The value of this line of investigation is undoubtedly very great and as a telling example might be quoted here, that it has resulted in settling one point which caused

great controversy amongst scholars. Most of you might have heard of a foreign Indo-Scythian dynasty that held sway in the north-west of India achieving great glory by extending the frontiers of India and becoming the means of carrying Indian civilization to far off lands. This dynasty falls into two groups, the first represented by two rulers, the Kadphises, and another group headed by Kanishka. Scholars were sharply divided into two groups, one of them arguing for the priority of the Kanishka group and the other for the Kadphises group. The final verdict had to be pronounced and had been successfully pronounced by the Taxila excavations of Sir John Marshall that the Kanishka group is posterior to the Kadphises group. The credit of it is entirely due to the Archaeologist although other accessories such as numismatics contributed their own share, but the conclusion rests none the less indubitably on the evidence of archaeology alone.

Archæology for this purpose can appraise the time to which an archæological find belongs only comparatively starting from a certain point and for that starting point archæology is more or less dependent upon other sources of information. While sequence can be clearly established from archæology alone the starting point has to be taken with reference to other considerations without denying the possibility of making a fair estimate as to the age of an archæological find, without specific reference to the starting historical point. This becomes clear when, in regard to the recent excavations so satisfactorily and with such fruitful results carried out in Knossos in Crete, Archæologists try to fix their time with reference to the dynasties of Egypt whose period of

rule rests upon other historical considerations, chief among them being the known dates of the Alexandrian and the Ptolemaic period. Even the Taxila excavations depend a great deal for their dating upon the find of Roman coins along with coins of other dynasties in the locality. It is these that give the more certain indications of time and thus archæology gets to be dependent upon chronology in one case and numismatics in the other. General archæology, perhaps by far the most reliable among these auxiliary sciences of history, cannot claim that absolute independence which perhaps some of the most enthusiastic votaries of these auxiliary sciences might claim each for his own.

What is said of archæology applies equally, perhaps with greater appropriateness, to subjects dependent thereon such as architecture and iconography. These are a great deal allied to each other and are to some extent dependent upon archæology. The fundamental principle upon which their archæological value is made to depend, is the application of a theory of evolution as strictly applicable to these and therefore providing an inevitable test of age in the degree of development or growth. There are two vital defects in the adoption of this principle absolutely; that development may be progressive or retrogressive, and there is no uniform measurable acceleration either way. What is more than this is the second defect that the conventions of a people and their convictions in regard to these cut across this principle very badly. These two serious defects discount a great deal the value of the evidence obtainable from these. Here again these sciences by themselves are not enough and they have to look for a point of starting somewhere and then proceed backwards or

forwards. While therefore providing a valuable accessory test these by themselves cannot be regarded as absolute tests even in respect of chronological sequence which their votaries claim for them. While analogies and similarities might serve their useful purpose the very possibility of imitation is against making chronological estimates on their evidence alone. While therefore more or less correct rough estimates of age could be made from architecture or iconography, such estimates ought not to be pushed too far for the reasons pointed out above and there is further the possibility of difference of opinion in these matters. In respect of some of the finds, particularly the devices on the coins of the Kushanas, there are two schools of competent archæologists pitted one against the other in regard to progress or deterioration of these devices. One set of archæologists holds there is a progressive development of art from Kadphises II to the last great Kushana Vasudeva; while another school, from the evidence of the same material, holds the opposite view that the artistic part of the work reaches its highest excellence under Kanishka and shows a steady deterioration of artistic worth till we come past the age of Vasudeva. If such opposite opinions are possible on the same material, it is hardly necessary to say it would be foolish to build absolutely upon such evidence. To us in India in particular, it is the conventions in regard to iconography in particular, and architecture to a great extent that interferes with the theory of development. It was pointed out long ago by Lysias in respect of Egyptian architecture, that due allowance should be made for the conventions of her people in studying their architecture. If that were so in respect of Egypt it is much more so in respect of India.

Numismatists give us more certain evidence of time where the coins happen to be dated in a known era. It is however very rarely the case in respect of Hindu coins which sometimes give, it may be the regnal year, or the year of a known era, such as the Kshetrappa coins. But when the coins are not dated scholars are driven to the same shift of judging and estimating their age from their provenance and the historical circumstances known of the locality in different periods of time. Evidence of coins is of two kinds: one based on the mechanical character of the fabrication and the workmanship, their similarity and dissimilarity to coins of neighbouring countries or neighbouring localities of known age, and their agreement or disagreement in respect of their quality as a standard of measure for purposes of commerce, internal, and more than this, external. The next has reference to the more important study of the devices on the coins and their legends. The devices alone tell you the tale of the model from which these are copied, if there were a model, and of the social and economic condition of the times from the dress and equipment, and of their religious condition if there should be representation of gods or goddesses upon these coins as often does happen. In undated coins usually it is generally estimates of age alone that are possible and even for these estimates scholars are dependent upon extraneous evidence. The gold coins of Kanishka are explained by an elaborate examination of the comparative weights and make-up of the gold coinage of Kanishka, and those of the early Roman Emperors and the conclusion has been arrived at that this gold coinage should have been issued by Kanishka when his territory had extended far enough to include in it a con-

siderable part of the trans-Indian borderland, and is stated to have been due to the necessities of overland trade with the chief port at the head of the Persian Gulf, Charax, at the time. The whole weight of this conclusion rests upon the comparative character of the study and the known history of the coinage of the other side. Where facilities for this kind of comparative study do not exist, and where you are driven upon the collection of coins relative to a particular locality or dynasty or place, the progress that you can make by their aid alone in your study of history becomes very limited, while the value of this evidence certainly is much enhanced if the study could be prosecuted with the aid of the other auxiliaries to this study.

Passing on to epigraphy by far the most important, so far, for the study of Indian history, archaeological work not having been carried on as far as to take its legitimate place yet, the material furnished by epigraphy has resulted in the building up of a great deal of Indian history that had practically been lost to us. Their value certainly is very great for the building up of history. The main branch of epigraphy consists of inscriptions on rocks and stones and pillars, inscriptions on copper plates and other metals and inscriptions on coins, which has already been considered in the previous section. As these last have a special character of their own it is much better that they are not included in epigraphy proper. In regard to the other inscriptions, these generally take on the character of royal edicts, either of grants to temples, institutions and Brahmins or of matters relative thereto in the great majority of cases. There are some important exceptions to it. Some few political documents have come down to us, but they are very few.

Others of a general character are the Asoka edicts, which stand by themselves alone, and cannot be included among the votive offerings and charitable gifts. As a class these documents are of the highest value as contemporary records of such historical details as they give in a very large number of cases. These sometimes embody also dynastic history extending over a number of generations. Being issued from the royal archives and by highly-educated professional scholars whose business it was to draft these documents, they may be taken as containing reliable matter. But they suffer from the defect of contemporary documents, for instance, the histories of Muhammadan scholars who wrote under the eye of their patrons or masters. There are likely to be in these errors of omission and commission; unpleasant truths or unpalatable facts may be omitted, flattery and praise may be indulged in, victories may be awarded where defeat was perhaps nearer the fact, but none the less they might be accepted as a substantially correct statement of facts as they appear to one side at any rate. There is always the possibility of your being able to check these by similar documents from the other. But when we get beyond the period that could be regarded as being within the knowledge of the writer, their value diminishes perceptibly. The correctness of these would depend exactly upon correctly recorded documents accessible to the writer, his correct perception and appreciation of those documents, and his own historical acumen in thrashing out facts from their encumbrances and stating them with the professed object of stating only historical truths, neither more nor less. But when we get to be remote from the writer and his age, the question of historical value dimin-

ishes perhaps in a rapidly increasing proportion. This is not often borne in mind and it is generally taken that where a fact happens to be recorded in an inscription, be it on a stone or on copper plates, it is given the value which it hardly deserves on any sound canon of historical criticism. One of the most remarkable instances in point is where this evidence comes in contrast with literary evidence of a contemporary character, as in the case of the Tamilian Karikala and his so-called contemporary Trinayana Pallava, this contemporaneity being deducible only from 11th century documents of the Eastern Chalukyas. Without going into too much detail the 11th century documents merely record that a certain fugitive prince came from Ayodhya 59 generations after Udayana and got into war with Trinayana Pallava, the chieftain of the locality and was defeated by his enemy. To add to the misfortune, he fell in battle. His wife then advanced in pregnancy, gave birth to a son in the house of a Brahman, and that son became later on a puissant warrior and founded the dynasty of the Chalukyas in the south. From others of the epigraphs we are able to estimate the actual age of the foundation of this Chalukya dynasty, and this date is tacked on to that evidence and Trinayana Pallava's age is taken to be established on that basis. With that is combined the statement that Karikala Chola overcame in war a Trinayana Pallava and that Trinayana Pallava is equated with this one, the successful enemy of the first Chalukya, and the age of Karikala gets thus fixed to somewhere at the commencement of the 6th century A.D. There is a famous Karikala in Tamil classical literature. Several contemporary bards have sung in praise of this Karikala. From these contemporary

*bards' lays we may take it that these bards know at least his parentage and some of the more prominent of his achievement. The parentage given by these contemporary bards differ from that of the copper plates of the 11th century from which the other facts are taken. The question immediately arises, which is more certain evidence on the question. The votary of epigraphy claims that the document though of the 11th century must have been based upon the known facts at the time, but he seems hardly willing to give that amount of credit for knowledge to the contemporary poet who sang in praise of the chieftains and obtained his rewards from them. Clearly as against such evidence of literature the evidence of epigraphy in regard to matter perhaps about a thousand years remote from the date of the event to which they relate must be taken to be out of court as against the contemporary evidence even of literature.

Before passing on to the next of our sources, reference must be made to one important section of epigraphy, *i. e.*, the evidence of palaeography. This consists generally in the evidence of age that palaeography gives in regard to documents which are otherwise not datable. This evidence certainly does offer valuable assistance and serves to make a fairly close approach to the approximate age of documents. Even so, the evidence of palaeography is vitiated perhaps to a smaller extent by certain vagaries of its own. There is the possibility of scripts of a different character being used in the same age and sometimes by the same person. Examples in point would be the Jain and Buddhist votive offerings in Muttra, and the Kailasanatha inscriptions of Rajasimha Pallava. This defect notwithstanding, it does offer a comparatively

fair guide to age, which could be made to serve a very useful purpose with sufficient caution.

Coming now to literature the time when the Hindus could be charged with a complete want of historical sense, on their having produced absolutely no history of any kind, is long past. It is a little more than a score of years ago that the late George Bühler raised the protest against this ill-founded, if not unfounded, charge. By historical work we are not to understand histories of the character of that of Thucydides. Of histories of that character even in Europe, there are very few till we come to the middle of the 19th century with perhaps an exception or two. But historical compositions that will compare favourably with the chronicles of mediæval Europe, and some of them have been far better, can now be quoted and that which was taken to be merely a romance is getting advanced, as our knowledge advances, to be thoroughly historical, *viz.*, the famous Harsha Charita of Bana. When Dr. Bhaudaji discussed the manuscripts of this work very few of his historical allusions were understood. Now very many of Bana's statements are clearly established by other evidence and such of them as are not proved are in a fair way to acquire that demonstration. But of course, manuscripts do get destroyed quicker, and even when they are preserved undergo changes incidental to their very nature such as transmission by copying, destruction and restoration and such other processes which can effect conscious and unconscious changes, and thus reduce their value as absolutely reliable historical documents. But where ordinary care is presumable and no motive can be established for purposeful alterations they are about as valuable as others. Where

documents do not profess to be historical and contain allusions they seem specially acceptable as the possible motive to mis-state comes to be non-existent. Since the days of Bühler manuscript research has sufficiently advanced to bring into view certain works of a professedly historical character and their value as history proves on examination to be unquestionable. But they relate to particular instances or periods or to particular personages, and we have not yet come upon anything like a general history, except such history as is contained in the historical chapters of the Puranas. Research in this line is likely to be more fruitful of results and calls for unremitting efforts.

It is the result of research in each one of these various departments of historical sources that have to be analysed, appraised and utilized for purposes of history, and when honestly done these materials, imperfect as they are in their nature, would still provide abundant material for the construction of history. The real historian of India therefore requires acquaintance, if not the knowledge of the expert, in each one of these branches, sufficient to enable him to follow the discussions and the expositions of the experts, and judge for himself how far a thing is satisfactorily proved or not, and then utilize that which is acceptable and reject that which, according to recognised canons of historical criticism, prove unacceptable. His duties call for faculties which are laborious in their acquisition and require great caution in their application.

THE ANDHRA UNIVERSITY— THE CENTRE AND ITS EDUCATIONAL REQUIREMENTS.

By

MR. G. SATYANARAYANA MURTI, M.A.,
Parlakimedi.

THERE must be at least two or three well-equipped high grade Science and Arts colleges providing instruction for the degree (Pass and Honours) courses of study. Provision should be made for vocational colleges in Law, Medicine, Engineering, Commerce and Agriculture. It is not necessary that all these vocational institutions should be in the University centre.* They must be distributed

* The problem of location of the University centre bristles with difficulties. Vizianagaram or Rajahmundry or Masulipatam or Anantapur or Bezwada or Madanapalle stands a fair chance of being selected as the centre. Of the last two, Bezwada is almost the centre for the Telugu tracts, a place of pilgrimage and a big Railway junction and hence, *ceteris paribus*, the University should be located here. Madanapalle may also be recommended owing to its excellent climate. Of the first four, each has already a first-grade college and so a claim to be made the University centre. Vizianagaram, if chosen, has the fair prospect of a princely donation or a rich endowment from the Maharajah thereof. As for Rajahmundry, it is the centre of Telugu learning and culture, a place of historical and traditional importance and the seat of the Government Arts and Training Colleges. Masulipatam can boast of the flourishing Jatheeyakalasala. Anantapur has recently become an important educational centre for the Ceded Districts. But much can be said against each of these places. Madanapalle and Anantapur are in the south-west corner of the Andhradesa and so prove inconvenient to many Telugus in the Northern Circars. Masulipatam is an out of the way place. Vizianagaram is, in spite of its prospects otherwise, very inconvenient owing to its being in the north-eastern corner of the Telugu tracts. If the authorities, owing to financial reasons, pitch upon Vizianagaram as the centre, it would prove a most ill-advised choice. Rajahmundry is not at all the geographical centre for the Telugu

throughout the various parts of the Telugu tracts with a view to derive the advantages of localisation. One at least of the big vocational colleges should be established in the University centre whatever it might be. The high grade Medical College might be conveniently located in Madanapalle and thus derive the advantages of its excellent climate and the institution there by the Government or the public of standard hospitals. A premier Commercial College might be located in Vizagapatam which has indeed a glorious commercial future before it after the actualisation of the projected harbour scheme. The Agricultural College should be somewhere in the Godavari District and the Engineering College in Vizagapatam or Bezwada. The Law College might be conveniently established in Rajahmundry. The Andhra University should make a new departure by adopting these suggestions lest the stereotyped plan of consigning all or most of the vocational colleges to the University centre should inconvenience the Telugus immensely.

There must be created sufficient academical atmosphere at the University centre by the

Desa. Bezwada, though no doubt such a centre, has at present not even an ordinary second-grade college. But if there is any basis in the rumour that three or four Christian Missions are, with their combined resources, going to institute there a premier first-grade college, Bezwada should unquestionably become the University centre and even if the rumour is baseless, the Government and the people should equip Bezwada with the necessary buildings, etc., and make it the centre. Rajahmundry is the second best place deserving to be made the Andhra University centre. Whatever place might be finally selected, my suggestion of establishing University Colleges in a number of places to be from the outset designed as the nuclei of further Universities will solve all sorts of practical difficulties.

location of museums, libraries, laboratories, demonstration factories, agricultural farms, parks, play-grounds, gymnasias, University dispensaries, hostels, halls of residence, the University debating-societies and reading-rooms, model colleges and collegiate high schools. Above all, the University centre must make suitable and adequate arrangements for *Post-graduate Studies and Research in some though not in all the departments*. I emphasise on this point because according to my scheme mofussil colleges are neither to be abolished nor absorbed by the University centre but some of them at least must be regarded as nuclei of future Universities and post-graduate studies, a very imposing and learned adjunct of University education, should not all be monopolised by the University centre. Some departments of post-graduate studies must be reserved for select mofussil colleges so that they might from the beginning have an opportunity to feel that they are, though affiliated to the University, part and parcel of the University itself. A possible and a really relevant objection to this aspect of my scheme is that the University centre would lose in its dignity, that the departments of post-graduate studies proposed to be distributed to some mofussil colleges could not have the benefit of the expedient of inter-departmental lectures, the co-operation of the staff of the premier arts colleges, etc., but if the University, from considerations of practical exigencies, cannot but be made partly affiliating and partly teaching, the mofussil colleges should not in all justice be deprived of the chances of highest education and culture and I would even go the length of suggesting that the special University chairs should not be religiously restricted to the territorial limits of the University

centre but the occupants thereof should, in select seasons of the year, be travelling to the affiliated centres of learning and deliver lectures there.

Special chairs have to be founded in the various subjects of post-graduate study and research and every Chief Professor must be well-paid and equipped with a staff of good Assistants, Readers and well-furnished libraries. High class scholars of well-tryed repute and learning should, without any regard for the claims of this or that nationality, be the occupants of these chairs. But care must be taken to see that every department should provide for Readers and Translators who should, though gradually, render into Telugu the highest results of research. The following departments of post-graduate teaching must be devised :—

(1) *English* with two divisions, one predominantly literary and the other linguistic.

(2) *Sanskrit and Telugu* :—A highly scientific study of Sanskrit should be fostered in this department. It will be very popular in the higher literary circles of the Telugus as Classical Telugu is in itself one of the most Sanskritic of the Dravidian languages. Further it should be borne in mind that Sanskrit is a great vehicle of higher researches of various kinds and "connotes in the domain of knowledge an empire by itself." The subjects of study in this department should include the Vedas, the grammatical system of Panini, Comparative Philology and the History of Sanskrit Literature, general as well as special. Provision must be made for general Sanskrit Literature (Kavyas, Natakas, Alankarasastra), Vedic Studies, Mimamsa and Smriti (i.e., Interpretation and Law), Sankhya and Yoga, Nyaya and Vaisheshika, the Darsanas,

Prakritic Studies and Ancient Indian inscriptions and historical geography. The orthodox Pundits, the repositories of our ancient traditions, must find honoured places in this department. Newer recruits of the Pandit class trained in Western methods of criticism as well must occupy special chairs. There should be no slavish insistence on the Devanagari characters alone since Telugu is as good a script as Devanagari for Sanskrit. The success of this department depends largely on the work and organisation of mofussil Sanskrit Colleges and Pathshalas. We want two sets of successful candidates from this department one set of scholars with great proficiency in general Sanskrit literature and sciences and language useful either as Pundits or propagators of ancient Hindu learning, and another set of scholars who should be trained in methods of higher researches and investigations of cosmopolitan importance.

The department of post-graduate studies and research in Telugu should be a special feature of the Andhra University. The subjects of critical study must be Telugu Grammar, Prosody and Poetics; Poetry; and the various types of Telugu Prose and all these subjects must be correlated with a study of the modern methods of criticism and research. One of the chief objects of this department should be the production of Telugu scholars capable of an efficient enrichment of Telugu literature of all types.

(3) *Pali* :—This is necessary for literary, philosophical and archaeological purposes. Distinguished Buddhist and Jain teachers must be appointed in this department aided of course by a good number of qualified English and Telugu-knowing savants.

(4) *Comparative Philology* :—The abstruse nature of the subject and its special linguistic

difficulties makes a large influx of students an impossibility but in view of the vast extent of the topic and its vital importance in the scientific study of the Oriental Classics and of the Indian Vernaculars this department is essential and it should be popularised as far as possible by obtaining the services of well-known specialists.

(5) *Islamic Studies, Arabic and Persian* :—Higher instruction, if sufficient Muhammadan students come, must be offered in Arabic theology, Literature, Rhetoric, Poetics, Grammar, Philosophy and Science.

(6) *Mental and Moral Philosophy* :—Provision should be made for a special study of the History of Philosophy, Western and Eastern, Psychology, Ethics, Sociology, Philosophy of Religion, Logic as Methodology, Logic as Dialectic, and special branches of Indian Philosophy, experimental and abnormal Psychology as well.

(7) *History* :—This should comprise three broad divisions :—(a) A general course in History, ancient, mediæval and modern, (b) a special course in Ancient Indian History and Culture and the History of the Andhras, (c) Archaeology, Epigraphy and Numismatics should also be cultivated for purposes of higher research.

(8) *Economics and Statistics* :—This is a department in itself and opens up an attractive and illimitable field of special work with a variety of avenues. I would recommend to the Andhra University an adoption of the London University scheme of studies for the Economics B. Sc. and M. Sc. degrees with of course the necessary and suitable alterations. The distinctive feature of this department should be a special study of the many complex Indian economic phenomena in such a

way as to suggest the best lines of India's economic progress. The post-graduate economic studies should be so organised as to offer ideal training in the following :—

(a) The principles of Economics, analytical and descriptive, with special reference to the United Kingdom and India;

(b) Economic History (general and Indian);

(c) Statistical and logical methods and their intelligent application to the Indian and non-Indian statistics of production, consumption, commerce, prices, income and population, variations in market values and wages, commercial crises and foreign exchanges. This branch which has not yet become a feature of any Indian University should also involve a special study of the principles of sociological nomenclature and classification, the use of hypothesis and analogy in social economics and the application of statistical and logical methods to sociological problems like births and deaths, health, education and anthropometry. Students choosing this department should have the necessary intelligent grounding in Mathematics (Graphical Algebra, Pure and Co-ordinate Geometry, Trigonometry, Logarithmic scales for curve drawing and the Theories of correlation and calculation of the co-efficient by the product sum formula);

(d) Public Administration as illustrated by the History, Theory and Present Organisation of India, England, France, Germany and the United States of America (comparatively treated);

(e) The history, theory and present systems of Banking and Currency;

(f) Public finance; (g) International Trade;

(h) Transport; (i) Insurance; (k) Demography;

(l) Public International Law including the

history and effect of the principal public treaties now in force;

(m) Accounting and Business Organisation; (n) Industrial and Commercial Law; (o) Constitutional Law and History; (p) Comparative Study of Social institutions, Psychology and Ethnology;

(q) Geography with special reference to the economic and political development and present organisation of India, Europe and North America.

(9) *Mathematics*, Pure and Applied, should also be specially studied in its various useful aspects.

(10) *Physics and Chemistry* and some special aspects of Technology should be also provided for.

(11) *Geography* :—This is a branch of learning which has not yet found a place in the curricula of any Indian University scheme of post-graduate studies. But, as seen from the following quotations, considerable is the intellectual value of the higher and scientific study of geography. The eminent geologist, Sir A. Geike, remarks: "The forms of the land and their origin, the climates of the globe, the distribution of plants and animals and the causes that have regulated it, the influence of the variations of climate, soil and topography upon the history of man and the reaction of man upon nature—these and a thousand other connected problems form the subject of the highest kind of geography." The Council of the Royal Geographical Society in its memorial to the Universities of Oxford and Cambridge says thus of Scientific Geography :—

"Scientific Geography does not confine itself to such a description of separate localities as may be found in gazetteers. Having

collected similar cases, it proceeds to group them together. It studies antecedent conditions and concerns itself with the action of concurrent phenomena upon one another in the same locality, showing why they tend to stability and to give to each country its characteristic aspect. Thus the geographical distribution of plants and animals and the light it throws on the early configuration of the surface of the earth is one of the very many problems with which scientific geographers are accustomed to deal. Another of the problems is concerned with the reciprocal influence of man and his surroundings; showing on the one hand, the influence of external nature on race, commercial development, and sociology, and on the other, the influence of man on nature, in forest destruction, cultivation of the soil, introduction of new plants and domestic animals, extirpation of useless vegetation and the like. This mutual relation of the objects of the different sciences is the subject of a science itself, so that scientific geography may be defined as the study of local correlations."

No one can deny that the subject of geography as thus defined should have a place amongst the post-graduate studies of the University of the Andhra Desa which abounds in immense natural opportunities for a profitable scientific study and investigation of the various interesting aspects of the subject. Remember that the study of this subject was far more deep-rooted in Germany, France and Italy than in England; for at the time when the Universities of England were being converted to the scientific view of geography given above, "there were already established 12 chairs of Geography in Germany, 7 in France and 12 in Italy." The importance of post-graduate studies in geo-

graphy can be further gleaned from the following:—Dr. Atwood, the new President of Clark University, U. S. A., announced in his recent inaugural address the plan of establishing at Clark a school of geography “unique in America and pre-eminent in this special field”: a school that shall give a training in the knowledge of physical, commercial and ethnological geography comparable to the training that several American Universities now give in advanced business methods. The pupils will be young men who have already had a college education or its equivalent and who wish to fit themselves for the great executive positions in International commerce or for posts in the diplomatic service.—(*The Modern Review*, Calcutta, Jan. 1922, page 109). It should, in this connection, be specially borne in mind that unless and until the students are given a sound scientific grounding in geography in the secondary and collegiate stages of education according to the recent rational methods of teaching geography, there can be no fruitful results of inaugurating a special University chair in geography or of making geography a subject of post-graduate study in the Andhra University.

(12) *Medicine, Western, Ayurvedic and Unani*:—The importance of the well-tried indigenous systems of Indian medicine and their superior efficacy in most cases are well-known and the forthcoming Andhra University would be doing sheer injustice if it does not establish some special chairs of Indian medicine and institute post-graduate studies in the same. I want also that the University should adequately encourage the post-graduate study of higher systems of western medicine. But my chief contention is that the claims of Ayurvedic and Unani

systems of medicine should never be overlooked either on the ground of the recent controversy about them or the Sadler Commission's categorical recommendation that the University cannot train students in these systems of medicine. The Calcutta University Commission Report (Volume V, para. 23, page 106) says: “It is clearly impossible that we should ask the University to undertake to train students on systems which ignore what has been done in science and medicine for centuries although they have preserved valuable knowledge.” The succeeding para. quotes the following from the speech delivered by His Excellency Lord Pentland of Madras at the opening of an Ayurvedic hospital in the Cochin State:—“Medicine, whether it be called Ayurvedic, Unani or Western, must follow the same methods and the same aims and submit to the same tests;.....any system of medicine must be correlated with every advance in the allied sciences such as chemistry and physiology.” With due deference to the scholarship and erudition of both Sadler's Commission and H. E. Lord Pentland, I beg to submit that the recommendation of the Calcutta University Commission regarding the Ayurvedic and Unani systems of medicine suffers from the two fatal defects of dearth of adequate educational statesmanship and the unmeaning superstition implied in the perpetual sufficiency of correlation of medicine with advances in science. I attribute these defects to the recommendation because (a) if only the Government and the Universities encourage the study and practice of these indigenous systems of medicine, not only will they be fostered on account of the patronage they thus receive but also a large number of Indian students take to the indigenous medical pro-

fession and help thereby to solve the pressing problem of medical relief in the country;

(b) Indian systems of medicine are not, as often alleged, altogether unconnected with the sciences of Chemistry and Physiology known to ancient India as Rasayanasastram and Sareera Sastram respectively;

(c) Though in several respects modern Chemistry and Physiology have made acknowledgedly many advances over the teachings of antiquated chemical and physiological knowledge of India, the belief that indigenous Indian medicine based to some extent on the exploded or partly exploded scientific doctrines of ancient India does not deserve the special patronage of an Indian University is untenable because (i) it is quite possible to impart a knowledge of Western Chemistry, Physiology and Anatomy to Ayurvedic and Unani students of medicine and make them practice medicine in an improved manner; there are many successful instances of doctors treating complaints according to both the eastern and western Vaidyasasthra; (ii) again, we clearly see that some Ayurvedic and Unani doctors succeed often in cases which prove to be the despair of even specialists in the western systems of medicine built on the vaunted citadels of modern advanced chemistry, physiology and anatomy; (iii) medicine belongs after all to a department of knowledge that is still in its empirical state; scientific necessity cannot as yet be pronounced the watch-word of the realm of medical knowledge; (iv) probably the belief of most of us that all systems of medicine should in all cases be based on the teachings of advanced chemistry and physiology, etc., is an irrational superstition that will in course of time be irresistibly

assailed by the application of the principles of abnormal psychology with its as-yet-unexplored potentialities. Most of the marvels of abnormal psychology and their efficacy in the treatment of several physical and mental complaints are as yet a tantalising puzzle to scientists. Further, has all the medical literature of the Ayurvedic and Unani systems been well-studied by Western Professors of medicine? Has the efficacy of all the drugs used by the indigenous systems of medicine been scientifically examined? Some half-hearted attempts may have been made of late but unless the Western doctors whose words are a gospel to our government approach the subject of indigenous medicinal systems with an unprejudiced and unbiassed mind and with a consciousness of the drawbacks of their own expert treatment in several cases that admit of an easy and radical cure according to the indigenous methods and until sufficient opportunities are given for the valuable medical lore of the ancient Hindus to be understood and scientifically studied by the Hindus, there is no meaning in giving vent to platitudinous effusions condemnatory of Ayurvedic and Unani systems. If the Government and the Indian Universities continue the present comfortable policy of studied and deliberate negligence of Eastern medicine and go on with their funny methods of shelving urgent problems by appointing ill-represented committees to voice forth what would afterwards be regarded as authoritative pronouncements, there is no hope of Indian indigenous medicine ever developing further; there is, on the other hand, every likelihood of the ancient art perishing in course of time for want of sufficient patronage. To conciliate public opinion, the Sadler Commission has recom-

mended the appointment of a fat-salaried Professor of Pharmacology and Materia Medica to "make available for the practitioners of Western medicine the traditional knowledge which is of real value." Even if the future Andhra University adopts this recommendation of the Calcutta University Commission, the millennium when, in the words of the said Commission, "the distinction between Indian and Western systems of medicine will disappear" will be further and farther off and what I would therefore recommend to the organisers of the forthcoming Andhra University is to consider this problem carefully and make Ayurvedic and Unani systems of medicine subjects of collegiate and post-graduate study and research in the Telugu University.

I would next recommend a few steps for the encouragement and stimulation of independent research and investigation into Indian and other problems by the *alumni* of the proposed Andhra University. Prospects of lucrative careers must be offered to the University research scholars. Residential quarters must be erected for investigators in the vicinity as far as possible of big libraries and laboratories. No such odd distinction as the Imperial and Provincial, Government and Private educational services should be drawn and the highest appointments should be thrown open to the successful investigators. For the delivery of special courses of lectures carrying the latest news of the world's educational progress, the Andhra University should invite not the third or the fifth-rate Western graduates who often find a luxurious holiday in India at the expense of Indian money but the most distinguished investigators from America and Europe for the benefit of those engaged in research as well as for the

encouragement and stimulation of investigation by others. Also, provision of encouraging stipends, scholarships, etc., must be made for promising Indian students to go to England, Germany or America for securing the necessary training in the general methods of research. This is often a cheaper and more enduring form of encouraging research work in the Indian Universities. The recommendation of the Sadler Commission and its slavish worshippers about the recruitment of all the Chief Professors in England should never be adopted by the Andhra University. Remember that no country in the world can rely on a foreign agency for its higher education for all time. "It prevents intimate assimilation of the foreign culture; it perpetuates intellectual servility which is even more insidious in its operations than political bondage; it prevents the calling forth of the best indigenous talent and enthusiasm for University work.....keeps alive in practice if not in theory a perennial source of racial discrimination and injustice pernicious in the extreme to the creation of true academic atmosphere.....Recruitment (of Professors) in England should be only for exceptional reasons after all honest and exhaustive attempts at finding indigenous talent and experience have failed." Another important requisite for the stimulation of real research is that Professors and students should be given real freedom of teaching and learning and of expression of thought within, of course, the limits of law but under no other restriction whatsoever. Politics as such must not be tabooed. Economics for instance should not be only such as would suit the British exploiters of India and their allies amongst the British bureaucrats in India and Great Britain. Again, independent schools of

THE LIFE AND WORKS OF SIR JOHN MALCOLM.*

thought and investigation which alone can yield fruitful and permanent results can never be created by European lecturers ignorant of the local needs, conditions and difficulties, but by scholars directly in close touch with the country's special problems, her peculiar situation, past history, traditions and latent possibilities. The proposed Andhra University ought to institute a Bureau of Intelligence under indigenous scholars to collect information and tabulate results regarding India's needs and possibilities, her available resources and the existing difficulties with a view to definitely lay down lines of future work and indicate the directions in which young workers ought to proceed. Charts and maps should be prepared by means of regional surveys and extensive tours for historical, antiquarian and economic investigations organised mainly for the benefit of post-graduate scholars and research students.

(To be continued.)

KARUNATARANGINI

(English translations from the author's original lyrics in Sanskrit)

By K. KRISHNAMACHARYA, B.A., L.T.

WITH A FOREWORD

By Prof. P. SESHADRI, M.A.

Price 4 as.

The poems are full of melody and fine sentiment.—*O. H. O. Magazine.*

"The translations are readable."—*The Daily Express.*

SRINIVASA VARADACHARI & CO., Triplicane, Madras.

XXVIII—78

THE publication of an abridged edition of Malcolm's *A Memoir of Central India including Malwa* serves as a fitting opportunity for reviewing the life of one of whom it has been said, "I believe it would be no exaggeration to say that the History (of the British Power) of India can be but imperfectly understood without an understanding also of the character of Sir John Malcolm." Born in 1769, he was sent out to India at the very early age of 13, at least as well educated as the majority of the cadets who "at that time with small Latin and less Greek set their faces towards the shining Orient." There is a funny little story told of his admission by the Directors of the East India Company into their service. There were in those days no fixed rules respecting the age at which commissions in the Indian Army might be held; but every candidate had to appear before a committee of the Directors and be approved by them. There was not much chance of the boy being approved; and he was about to be rejected, when suddenly a Director asked him, "Why, my little man, what would you do if you were to meet Hyder Ali (who was then a source of terror to the English at Madras)?" "Do, Sir," said the young aspirant in prompt reply, "I would out with my sword and cut off his head." "You will do," was the rejoinder, "Let him pass." "Thus the lofty spirit of the boy atoned for his lowly stature, and that was granted to his big words which would have been denied to his few inches." And Malcolm

* Malcolm's *Memoir of Central India*, abridged and edited for the use of schools and colleges, by C.H. Payne. (London: Routledge and Sons, Ltd.). Pp. vi & 162.

reached Madras in 1783 where he was posted to garrison duty at Vellore.

The first years of his life in India were spent much in the same way that young soldiers usually spend that period. Soon a zeal for reforming himself and his ways of living overtook him; he determined to study Persian, the language of political intercourse, and began seriously to reflect upon the interesting events happening before his eyes and the nature of the ties that existed between the British Power and the Native States. He joined Lord Cornwallis in his campaign against Seringapatam (1791 A. D.) and was appointed Persian Interpreter with the Nizam's Troops. From this time his steady promotion was assured and henceforth we see him mainly in the character of a diplomat and administrator. He rose to be Secretary to the Commander-in-Chief of the Madras Army; and shortly afterwards he distinguished himself along with Colonel Kirkpatrick in the disbanding of the French Corps of the Nizam. Believing fully in the effect of a vigorous display of force and the mailed fist, he became very popular with Lord Wellesley's Government.

Meanwhile events were taking place in Europe and Western Asia which transported Malcolm to a still more important and extensive theatre of action. As yet he was only a member of the Commission for the settlement of the Mysore country after the death of Tippu, though even in that capacity he was closely associated with such men as General Wellesley (later the Duke of Wellington), Thomas Munro and Colonel Barry Close. Then Napoleon was trying to effect alliances hostile to the English with every possible Asiatic power; and to secure the friendship of Persia and Afghanistan became for a time

the great aim of the British Indian Government. Wellesley determined to send a mission to the court of the Persian monarch and selected Malcolm to conduct it. Nor was Malcolm less successful in his achievements as ambassador than his master Wellesley was as a conqueror and statesman. He concluded two treaties, the one commercial and the other political, with the Persians by which the English and the Persians should combine to resist any foreign power that might threaten the integrity of Persia. Whether the treaties were ever really in force is a matter of some doubt; but a good understanding was established with the Persians who greatly admired the English envoy's liberality, good humour, strength of resolution and commanding appearance.

Malcolm, during his visit to Persia, did not completely wrap himself up in his diplomatic mantle. He, with his usual zeal for acquiring knowledge, made researches into the history of the country and the habits of its people, which later, made their appearance in the shape of two magnificent quarto volumes published by Murray and entitled *A History of Persia*. The book was most warmly received by the literary men of both Great Britain and France and got particularly fine tributes from the pens of such men as Byron and Scott. As his admiring biographer, Sir John Kaye, remarks, we should remember that literature was only a digression in Malcolm's life; and it is probable that if he had been less a man of action, he would have been more highly esteemed as a man of letters.

After this, Malcolm's first mission to Persia, he got unstinted commendation of his work from Lord Wellesley and was appointed to act as the Governor-General's Private Secre-

tary and soon afterwards deputed to Madras on a mission of much delicacy. His duty done and himself having returned to Calcutta, he was once again despatched to Bombay where the unhappy assassination of the Persian ambassador who came to return Malcolm's visit, produced an untoward situation. Malcolm did all that he could to appease the expected resentment of the Persian Court and wrote letters of explanation and condolence to the Persian Shah and his ministers. (1802). Malcolm then took an active part in the prosecution of Lord Wellesley's Maratha policy and wars; it was a great epoch in the history of the British power in India; and for some time there was the most cordial association between Wellesley, the hero-actor of this drama, and Malcolm.

The first great work which fell to the share of these was the restoration of the Peishwa, Baji Rao, to the throne of Poona. Malcolm was subsequently engaged in numerous negotiations and busy at his old art of diplomacy and treaty-making. And when Wellesley retired and his entire political system was subverted by his successors, Sir George Barlow and Lord Cornwallis, he continued to work as best as he could, though the new policy of Calcutta was extremely distasteful to him, but being cheered by the friendship and sympathy of Lord Lake, the Commander-in-Chief. He found himself often in opposition to Sir George Barlow and at this time "often longed for one hour of Wellesley—in his prime; and he tried hard to tempt brother Arthur (Wellesley) back to India." He was alarmed as to the safety of the Empire by the Vellore Mutiny. In 1807 he married Charlotte, daughter of Colonel Campbell, who was afterwards Commander-in-Chief at

Madras; and the marriage was said to have been productive of much happiness to both.

Just at that time French activity in Persia was at its height; and a magnificent French mission at Teheran was determined to keep the English out. Lord Minto, the new Governor-General, soon resolved to send Malcolm to the Persian Gulf with a commission of a vague character, half military and half political. Malcolm erred by assuming a too dictatorial tone, "and precipitated a crisis which it would have been sounder policy to delay." The French embassy had deluded the Shah into the belief that it was only by French intervention that Russia could be induced to relax her grasp on Persia. Malcolm however continued to maintain that the language of dictation, which he had used, had nothing to do with the failure of his mission. Though there was some talk of his going back to the Persian Gulf and establishing himself by force on the Island of Karrack, the project came to nothing; and he thought of returning to his substantive place, the Residency of Mysore, and hoped that there though he could not make history any more, he could at least write it. His intercourse with Sir James Mackintosh, the founder of the Bombay Literary Society, which later on developed into the Bombay Branch of the Royal Asiatic Society, fired anew his literary ambition. And he was seriously thinking of completing his *History of Persia* and the projected *Political History of India*. But to such a busy man as he, repose was not granted for long. He was sent to restore discipline among the troops at Masulipatam.

Scarcely had he returned to Madras when he was asked by Lord Minto to proceed to Persia on a mission which was only too successful, the chief results of which were

that in "Malcolm's honour primarily, the order of the *Sun and the Lion* was instituted, and additional materials were collected for the long contemplated *History of Persia*." It was on his voyage out to Persia that he applied himself to the finishing of his *Political History of India* the sketch of which he brought to a completion during his stay at Bushire (1810).

Throughout the next year, Malcolm remained at Bombay applying himself to his literary labours, and enjoying the society of Sir James Mackintosh whose versatile intellect and wonderful talk he greatly appreciated. A poetical effusion of his, entitled *The Persian Traveller* was deemed by Mackintosh to have more thought and nerve than correct and smooth verse. On the whole the learned judge criticised and corrected his friend's works and "admired more his character than his composition;" and he declared, truly enough in this case, that "men with great talents for active life are inferior to themselves in their writings." Malcolm however persisted in his account, historical and descriptive, of Persia, while his brother workers, Pottinger and Elphinstone, undertook to describe Sindh and Baluchistan and Kabul respectively—Elphinstone having been then appointed Resident at Poona.

Malcolm spent the next few years in England, uncertain about his future career. Here he was knighted by the Prince Regent, frequently consulted by the President of the Board of Control, and examined by a Committee of the House of Commons, while he continued to work assiduously at his *History of Persia* which finally appeared in 1814. He visited the continent after the battle of Waterloo where he renewed his friendship with the great Duke, and was soon after

honoured by the Oxford University with the honorary degree of Doctor of Laws. A return to India, a round of visits to the great Residencies of Mysore, Hyderabad and Poona as the Governor-General's direct agent, a participation in the battle of Mehidpur, success in bringing the Peishwa and Holkar to terms—these were followed by his settlement of Malwa of which he was placed in political and military charge from 1818 to 1822. "The names of Malcolm and Malwa have never since been disunited"; and as one writer remarks, Malcolm will be remembered in Malwa as long as regular government exists, because it was he that laid the foundations of it. During these years he collected materials for the illustration of the past and existing condition of Malwa which he formed into a report and transmitted to Calcutta where it was printed by the order of Government. Later he solicited permission from the Court of Directors to make the report the groundwork of his *Memoir of Central India* published in 1823 in which he added some general reflections on the fabric of the British power in the East and on the species of administration best adapted to Malwa, Central India and the adjoining tracts. The *Memoir* is a work which no student of Indian History can afford to neglect; it treats of a province which was the scene of far-reaching events; it brings the reader into intimate touch with some of the most interesting of the races of India; it traces the origin and development of the Native States and of the Protectorate system of British India; and "it illustrates, perhaps better than any other work, the causes which led to the extension of British influence and control." But we have to remark that the style of the *Memoir* does not even come up

to the standard of Malcolm's other works; and "though lacking neither dignity or force, it seldom reaches a high literary level, while the meaning of his sentences is frequently obscured by their loose or faulty construction." The historical matter, which alone is presented in the abridgement of Mr. Payne, is much scattered and is arranged according to no definite plan; and the continuity of the narrative is frequently broken, while in some places there is tedious repetition. The book speedily saw a second edition and has since been regarded as a classic among Anglo-Indian accounts of Indian History.

There was a proposal to make Malcolm Lieutenant-Governor of Central India; but it came to nothing. Again Lord Hastings thought of him as Governor of the Straits Settlements; but Malcolm only saw the ludicrous side of the proposal and joked freely at the notion of being converted, after such a career into a "Pepper-cloves-and-cinnamon Governor." After completing his appointed task in Malwa, he returned to England with no intention of taking up work in India, unless he could return as the Governor of a Presidency. He had been overlooked on one ground or another on both the occasions when Munro and Elphinstone were appointed to Madras and Bombay respectively. His old friend, the Duke of Wellington, tried to persuade him to enter Parliament; but Malcolm persisted in dreaming of and striving after an Indian Governorship; and at last in 1827 both the Cabinet and the Directors concurred in appointing him to the Governorship of Bombay rendered vacant by the retirement of the illustrious Elphinstone. He departed for India with words of godspeed from both the Duke of Wellington and Mr. Canning. During the short period that he was Governor of Bombay,

Malcolm made his mark by dint of steady work, though there were no great opportunities for him to display his great executive capacity. His minutes were distinguished by a strong sense of justice and a warm sympathy for the people. He was not however happy at Bombay and quitted India finally in 1830. His labours as Governor were very arduous and continuous and comprehended a great variety of subjects. He wanted to develop the resources of the land to give an impulse to cotton and silk cultivation, to construct new, and improve old, roads, to encourage steam communication with England and to open the telegraph (then quite new) in the country. But he was hampered much by the ever-present necessity for retrenchment; and his measures of retrenchment did not make him popular with the European community of the Presidency. But all communities united to do honour to Malcolm at the moment of his retirement from the Governorship of Bombay after such a long and illustrious career of public service. They presented numerous farewell addresses to him, raised subscriptions among themselves and erected a noble marble statue (by Chantrey) which stands even now in the Town Hall of Bombay.

The story of his remaining span of life is briefly told. Though sixty-two, Malcolm believed that he might yet be useful to his country and began to brace himself up for a Parliamentary career. His friend, the Duke of Northumberland, procured for him the seat of the borough of Launceston in Cornwall. He was greatly opposed to the Reform Bill, and flung himself with great zest into the contest. He even wrote a pamphlet in the shape of a *Letter to a Friend in India* on the subject of Parliamentary Reform. He was very apprehensive about the probable effects of the

Reform Bill on the destinies of India and suggested in the course of a speech on the floor of the Commons the expediency of giving India representation in Parliament. For this purpose he recommended that all the male holders or Proprietors of the India Stock should be formed into a constituency and should have the power of returning four members to Parliament—the members being qualified by a twelve years' residence in India—a scheme which, however much it might have become unsuited to the needs of later days, had the merit of boldness, a certain amount of originality and prescience.

He later on visited the family seat of Lord Clive, where he found some original family papers which enabled him greatly to elaborate the *Life of the Celebrated Lord Clive* in which he was engaged. Besides this literary work, the *Life of Lord Clive*, he commenced a book on the Government of India which he believed would supply much information and would embody the results of his fifty years' experience of that country, and which was published in 1833. Soon after he actively espoused the cause of the East India Company in its struggle to have its charter renewed and in its attempt to save its political control over India from being taken away. This was his last public act. Soon afterwards he sickened and died after a short period of illness. Fitting monuments were erected to his memory by friends and admirers in England and in Scotland. "A noble monumental statue by Chantrey adorns our venerable abbey at Westminster; and a lofty granite obelisk, of which it has been said that, symbolising Malcolm's career, it rises from the heather and looks across the border far into the grey distance, stands out against the sky from the summit of Langholm Hill."

But as Kaye well remarks, "Malcolm has made for himself a monument more enduring than that carved from the freestone of his native hills. He needed neither statue, nor column to perpetuate his memory. History will do that for him. In the annals of our Indian Empire, no name more frequently occurs, or is more honourably mentioned than that of Sir John Malcolm"—not even the names of his great contemporaries and fellow-workers, Munro, Elphinstone and Metcalfe. His talents, his enormous store of energy, his executive powers, his political sagacity, and his faculty of conciliating and enlisting men in his service—these made him what he was. He was a large-hearted and large-visioned man, not a precisian about small things; and he formed the characters and made the fortunes of more good officers than any man who served in India.

Of Malcolm's literary labours we have had occasion to mention all the more important results except his *Sketch of the Sikhs* which does not attract the reader's attention so prominently as some of his other works. "How it came to pass that a Scotch farmer's son in the end of the 18th century who left school at the age of eleven with some eighteen months of academy in London afterwards, should be able to fit himself out in ten days (as Malcolm did on the occasion of his visit to his old friend Wellington in Paris after Waterloo) to hold philosophical conversations in French with Humboldt, Volney, Denon and Silvester de Sacy is more than we can comprehend. The secret perhaps lies in one sentence in his *Life of Clive* where he speaks of that self-education, which after all, is of all educations the most important."—(Douglas—*Bombay and Western India*, Vol. II, p. 66).

A SHORT NOTE ON THE REFORM BILL.

DEFECTS IN THE PRESENT SYSTEM.

ALL of us are now familiar with the shortcomings of the system of University education in our province. (1) It has been out of touch with the people and their needs. It has been providing only liberal and not bread-and-butter education also. (2) It has not brought about a spirit of research for the advancement of learning. We have been thus far largely only distributors of standardised knowledge. The brain of a modern educated youth may be fitly compared to a fountain-pen which has a fountain only in name and ceases to write when the ink that is artificially put in is exhausted. The knowledge we acquire is not assimilated and increased due to many reasons. To take History-teaching as an example, one of the main reasons why research in Indian History is not fast advancing is that most of our graduates do not possess a good knowledge of their vernacular or Sanskrit. (3) Nor has our University attended to the welfare of our students and teachers. A large majority of our students have to live outside hostels—they are only a few and these are better housed than described. They receive education at a very high cost and they do not get adequate salaries in life to make both ends meet. (4) Lastly, an emphasis is laid on examinations and the divorce between teaching and examining has put a premium on cramming and encouraged teachers to coach their pupils for examination and "showing results."

DOES THE BILL REMEDY THEM.

The Bill includes agriculture and commerce under University education but this will not

In his prime Malcolm was probably the finest looking man in the European community of India. He was nearly six and a half feet high, proportionate and well-built and very muscular. His fame and moral strength now rest upon books written either by himself, or of his actions and doings. The chiselled figure of him that stands in the portals of the premises of the Asiatic Society of Bombay deals only with the outer framework of the man—magnificent and gigantic as it is. "Where Chantrey (the sculptor) ends History begins, and the divine chisel shapes the block from Burnfoot into a glorious body, not indeed without a spot or wrinkle, but beyond the power of marble to express or delineate."

C. S. SRINIVASACHARI.

TALISMANS AND CHARMS

For those People to Avoid all Sorts of Misfortunes and Enter the Gates of Successful Life.

	Rs.
For Honour, Riches, Learning and Greatness	7-6
For Health, Physical Strength, &c.	7-0
For Power of Eloquence, Speeches, &c.	7-8
For Success in any Undertaking or Litigation, &c.	10-8
For Success in Sport, Racing, Cards, Games of Chance, &c.	7-8
For Success in Trade, and Business	100
For Men's Love to Women	7-0
For Women's Love to Men	10-8
For Love of Opposite Sex, attractive power	7-0
For Agricultural Prosperity, Farming, Good Crops, etc.	7-8
For Success in Mining Plumbago, &c.	100-0
Rabbi Solomon's Special Talisman for every success. Specially valued and worn by every successful	15-0
Hebrew, 2nd quality	21-0
1st quality	30-0

NOTE.—A Money Order will bring the Talisman to your door. Always the full amount should be paid in advance. No V. P. P.

Extensive Life Readings ... Rs. 15.

D. A. RAM DUTH,

ASTROLOGER,

No. 30, (E.R.) Choku Street,
COLOMBO (CEYLON.)

relieve the people in any way. The bulk of our students have to be directed early in life to technical institutions, else, the bread problem can never be solved. The newly-created University must be only for a few who come up to the B. A. standard. Again, how a spirit of research can be infused in our young men if fewer or more Madras colleges are put together and called a Teaching University passes my understanding. Unless the University controls the appointments in the constituent colleges, the standard of teaching may not be high. The most iniquitous feature in the Bill is, it leaves the mofussil colleges in the cold, institutions which have contributed much to the name of the Madras University. Even though there is the same course of studies and examinations for the constituent and affiliated colleges, the graduates of the teaching University will be preferred for appointments and with the already decreasing demand for graduates, the affiliated colleges cannot attract many students. The financial problem is the most acute. If the University can encourage affiliated colleges with financial help as it does now and if the new University will not be a serious drain for years to come upon the pockets of the "poor and ignorant" taxpayers of the whole Presidency are questions deserving very close consideration. The constitution itself is not free from defects. The investment of a large amount of power with the Chancellor and the presence of a moneyed oligarchy and communal representations in the court are not quite desirable. Representation of local bodies in the council of affiliated colleges is obviously unnecessary. Dominated by the other bodies, the representatives of the affiliated colleges will go down in prestige and importance.

SOME OTHER REFORMS PROPOSED.

We have been unchanging for more than half a century and we now want to take a leap, perhaps in the dark, for a costly proposal which will desert the mofussil institutions. Instead of that, what if the small funds at the disposal of the Minister are spent in directions which are more essential and which will help the evolution of three or more Universities in the near future? Reforms may now be introduced for a more representative Senate, a bigger and largely responsible Syndicate and for Boards of Studies and examinations which will be thoroughly representative of all the 1st grade colleges, the 2nd grade colleges being reduced to the position recommended by the Calcutta Commission. The funds may be utilised in instituting and encouraging Boards of Research in some select mofussil colleges and for more hostel accommodation for the students of the Presidency. Some sort of Tutorial system may also be introduced and the number of lectures reduced. Above all, whatever can be spared must be spent on Technical education for the bulk of our S. S. L. C. holders.

CONCLUSION.

What has been suggested above will be good enough during the transitional stage, i.e., till sufficient funds are forthcoming for the establishment of Universities outside Madras. The present Bill will benefit only a chosen few and the metropolis which has been dominating us all along will continue to do so.

K. R. SUBRAMANIAM,

TIME ELEMENT IN SCHOOL-LIFE.

WE generally hold school from 11-30 A.M. to 5-30 P.M., and take the students to the play-ground in the evening. The school time is in most cases divided into 6 periods with a period of recess at about 3 P.M. Now, this Time element has a certain effect on the body and mind of the students and so on our work in the school. To weigh this effect rightly, we must study another element in the student's life, viz., the influence of the religious and family conditions around us. The number of students living outside this influence, i.e., in hostels attached to schools is almost negligible.

The first fact that should strike us is the way of life of the average guardian. And we know that the father of the family attends to his vocation in the morning and in the afternoon, and is at home for his meals and his rest at noon and for an hour or two thereafter. No doubt the Government servant section of the guardian world has his time of duty similar to our present school-time, but this class forms only a small minority, and its percentage is decreasing day by day, as Secondary education is growing in popularity among the middle classes. Secondly, we must note that among the day's family and religious functions of our households, the dinner is the last, after which comes the rest of the house-wife.

These two facts should guide us in picking out one at least of the causes of our student's deterioration. Just imagine, if you have not yet had the actual knowledge of it, the sort of dinner, our school-boy must be getting, and the haste with which he must have been daily disposing of it, wedged in, as he finds himself, between the anxiety of his mother

in trying to finish the daily round of her functions before the meals, and the strict observance of punctuality in his school. In fact, he has to finish the stated portion of food found ready at his stated hour, within the stated number of minutes at his disposal. Thus prepared for his day's work, the thriving youth has to run to the school to catch the bell, and then begins to attend to his First lesson purposely put there as the most important and serious part of the day's work.

What an interesting study this case would be for a curious physiologist to follow the course of the poor pupil's blood, rushing now to his stomach to try to digest the half-masticated food, then to his heart to enable him to quicken his pace towards his school and thence to his brain to help it to grasp the most difficult lesson of the day! Is it a wonder, then, that notwithstanding all our instruction of the rules of Health and Hygiene, and our game fees and game timetables, the student is found to have already imbibed the well-known city disease Dyspepsia by the time he leaves education in search of his vocation. And no more wonder it should be to us teachers to find students getting duller and more inattentive and less zealous as they rise higher in their school standards, i.e., in direct ratio to the number of years for which they have been 'trained and broken' under this system of school-time.

In fact, it will not be wrong to say that from the entrance of the student, we have been instilling in his system, unknowingly though, and hence unintentionally, the poison of Dyspepsia, in small but regular doses, every day.

This much for the opening of our school punctually at 11-30 A.M.!

Now as regards the long recess in the afternoon, the time is hardly enough for the students to go home, enjoy their tiffin and do these things with reasonable ease. And yet they generally avoid bringing something for their tiffin in the school, on account of the scruples of religion and decency of themselves and their parents. Then in the evening if their school is outside the city, the play-ground is close at hand, and they have to go there directly from their schools, obviously with empty stomachs. But when the school stands in the heart of the city, the students run home, eat something in haste, and run back to the play-ground outside the city. Which of these two cases is more desirable for the growing physique of the youth?

The more we go into details, the more shall we be convinced that the Time Element is responsible for a lot of mischief and inconvenience and disappointing results in our schools.

Convincing as all this would seem, it may yet appear as a necessary evil. How can the full-day school-time be avoided? The remedy is simple. We have simply to go back to our old days, or to take a lesson from our present Primary village schools. Let us follow them, and hold our Secondary City schools also twice a day, in the morning and in the evening. We will still have our six lessons for the day, three and three, each of 45' though, with 5' for sundry work before the 1st period each time and a short recess of 10' after the first two periods. It has been proved by German educationists that 45' is the maximum limit of time for which we can sustain the attention of a student in one subject.

Our school-time then shall be from 7-30 A.M. to 10 A.M., and from 3-30 P.M. to 6 P.M. in the long days and from 8 A.M. to 10-30 A.M. and from 3 P.M. to 5-30 P.M. during the short days of the winter season. The students will be taken to the play-ground directly from school and will remain there till dusk.

We are sure to gain a good deal by this change. We ourselves as well as the students can enjoy our dinners at ease and therefore with a taste. Then the students can spare their bodies, the unwelcome, untimely and unhealthy exercise of hastening to the school. Moreover, and what is very effective, we get hold of our pupils both times with quite fresh minds, ready and willing to listen and work. On no occasion is the stomach of either the teacher or the taught too full or too empty for brain work, but both come to the school after light refreshments of the breakfast and the tiffin enjoyed in their family circles. To add to this healthy tone of the body and therefore the mind, a morning bath should be advocated and insisted upon. Then again, the time available for assigning home work is split up into two parts, and its nature also can be kept two-fold, something to write in the afternoon and something to read at night. Thus we can diminish the feeling of its burden without lessening its desirable quantity.

Along with these advantages to us teachers, there are others accruing to the family and thus to our social life. The mother need no longer curse the hurry of the school and chafe and fret at her son for no mistake of his. The boy need not forego a part of the day's menu and be satisfied with what is prepared within his meal hour, and dispense with it in a business-like manner. The father can utilise

the best opportunity known, *viz.*, the time of the family meals, for instilling in the youth the home influence and the family traditions. The student, with his refreshment taken at home quite long before going to the play-ground, will be in quite a congenial attitude of mind and body, to do full justice to his kit and comrades.

And further, this arrangement of our school-time will go to solve one more of our difficulties, automatically. We know, that our religious life is so blended with our social life that every household has to perform certain special religious functions over and above the daily religious routine, every now and then. Not a fortnight passes without such a festival and the correlative pudding, for, that is the minimum form and the attractive feature of the religious rites. But then, can the youth, the cherished sprite of the household, enjoy his sweetmeat, with the dread of the school-bell dinning in his ear? And if he can not do it, what avails all the trouble and hurry of the mother? How earnestly will she endorse her satisfaction at the plan of keeping the young people at home at noon to enjoy these little family feasts, at an hour, a little later than the usual one, allowing her to prepare her pudding with more leisure and to serve it to them and to the father of the family, all together. Equally pleased will the class-master be to remove the main cause of pupils coming late, removed. On certain occasions we have to hold our schools an hour later, to allow for these dinners. But in cases like the Mahalaya महालय fortnight, *e.g.*, there is no remedy for late-comers. The proposed system does away with these difficulties together.

And what is there to be put down on the debit side of the account of this proposal? For one, can find nothing.

It might be said that the fresh morning hours should be reserved for home-work with advantage to the student. But do we not feel, that the principle of finishing the studies in the class-room itself and then to lessen the home-work, is the right attitude in the matter? Taking the same principle a step further, it appears just right to engage the students under our direct supervision at the time when they are most vigorous, and to assign to them some secondary work for their duller moments. Thus the objection itself goes to strengthen the proposal.

Secondly it may be pointed out that the teacher loses his morning time usually required for household affairs. To avoid this inconvenience, we should hold, in the middle of the week, a one-time afternoon school in place of our present Saturday morning schools. This morning in the middle of the week and a Sunday will give us enough time for the management of our private affairs.

To avoid the pinching cold of the winter mornings in December, we may have full-time afternoon schools from 11-30 A.M. to 5-30 P.M. as we have them at present. This substitute for our usual short time morning schools in April will certainly be a perceptible gain in convenience and school work. But these are minor points, and solutions will easily be found for such when we once accept the principle and system of holding schools twice a day.

Therefore it only remains to be desired that the proposal be given a trial for a term or two somewhere, and a record formed of the results of the students' average growth in body, found by weights and measurements, and in mind, found by the average percentages of the examination results. These can then be compared with those of schools working under our present system. And thus let the proposal plead for itself in clear terms of facts and figures.

R. S. JOSHI.

178, Shukrawar, Poona City.

P.S.—I would be glad to hear from critics both in favour or against my views and suggestions as to how to modify them or bring them into effect.

[NOTE:—This article has special reference to conditions prevailing in the Bombay Presidency.—Ed., E. R.]

MEMORY OR REASON.

IN educational as in political discussions men are fond of using catch-phrases expressing partial truths. "Education does not consist in book-learning but in the development of character," says one. Ask him to give an outline of an ideal school and you will find he has provided for book-work only and about character-development he talks shop. "Self-education is the best," says another, and writes volumes on how auto-education can be imparted. "Teach without text-books," says the third, and is himself the author of numerous text-books. "It is not important *what* a boy knows but *how* he knows it," says the fourth, and his very first question in the class will seek to find *what* a boy knows.

These contradictions are inevitable. They are the result of loose talk and the habit of quoting well-known authors without properly understanding them. These quotations do not express universal truths like those in the Ten Commandments and it is ridiculous to quote them with a sort of educational fanaticism. In many cases the expressions were first used to produce a strong prejudice against the existing practice and therefore are true only within certain limits. Our present educationalists take their lead from the eighteenth century writers and rightly so, but the world has much advanced since their time and important modifications have become necessary in our educational ideals. The idea of compulsory education and the absolute necessity of learning to read and to write was probably unknown to them. The minimum that a man or woman must know now is far greater than what sufficed in the days of Locke and Rousseau. The enormous

development of day-schools and vocational-schools was beyond their imagination. The powerful middle class controlling a number of specialized trades was then almost non-existent and very few then thought of educating the man in the street. The world has passed through a gigantic revolution and as Pestalozzi put it, it has become necessary for us to fix once more the direction in which our educational coach should move. In these circumstances loose, ill-considered quotations from famous authors not only indicate poverty of intellect but are likely to lead us astray.

One such maxim in my opinion has done the greatest harm to the cause of education. "Do not load the memory of a child," says a modern educationalist, "but develop his reason. Instead of making a boy learn things by heart show him how to deduce them." How sound appears the advice and who will ever think of contradicting it! Followed at the proper stage and with necessary limitations it has produced only the best results in a class. But its ignorant extension and its universal application has done much harm. It is a catch-phrase we are dealing with here and like other catch-phrases is fallacious. In this paper it is proposed to expose the fallacy.

There was a time when everything was learnt by heart from the poems of Homer to the theorems of Euclid, from the parables in the Bible to the dialogues of Socrates. In days when the art of printing was not known and books were as rare as gold this was inevitable. The practice however continued even when books became cheap as dust. A modification had become necessary. Somebody burnt the thread holding the bob of the pendulum and it swung to the other extreme

From a veteran Syndic to the newly-appointed Inspector, from a merchant-prince to a raw journalist, from a well-read nobleman to a budding orator, a school-master is bored with constant advice. "Care for the boy's reason, not so much for his memory." If you express any doubts about the efficacy of this elixir of sound education you are looked upon as a fit inmate for the asylum.

A little careful thinking will show us however that we are wrong in supposing the memory and the reason to be independent organs in the human body so that one can be nourished and developed independently of the other. I am not a psychologist but I suppose I am making a fairly accurate statement when I say that memory and reason are like the root and branch of a tree completely inter-dependent, reason depending on memory more than memory depends on reason. A branch may be lopped off and still the root will thrive but the converse is not possible. Instances are known when reason remains undeveloped or has become dormant, but the memory grows stronger; if however the power of memory fails, the power of reason vanishes automatically.

We often find a boy who knows his theorems well but cannot solve a rider, a doctor who has learnt his *Materia Medica*, but cannot write a good prescription, a pleader who has mastered the I. P. C. and the C. P. C. but cannot argue a case. We cannot however imagine a boy solving his rider without knowing the theorems, a doctor writing a good prescription but ignorant of the names and properties of drugs, or a pleader arguing his case well but not remembering the numbers and contents of the sections required. It is not sufficient that the theorems or drugs are known; they must be so well remem-

bered that they can be used any moment without any effort. The way to reason is through memory, and there appears to be a chord or valve between them which requires to be moved before reason is made active. The flaw in the old system was that this was not done early enough; sometimes it was not done at all. It is however fallacious to suggest the possibility of the development of reason by neglecting memory training.

It is often argued that it is sufficient if a boy knows where to get his knowledge of a thing and how to get it. There is no reason why he should learn things by heart. Of course there comes a stage when the brain is over-crowded with facts, and we have to drop out some. But then this is a necessary evil and not a thing to be imitated at all stages of life. I read of a big explosion in a town in Germany and forget the incident in a minute. I hear of a fire in Poona and spend an hour in discussing the details and criticising the Municipal Fire Brigade. If I had known of the town in Germany as much as I know of Poona, the explosion would have certainly produced greater impression on my mind. I can perhaps find the description of the town in a Geography book, but that is no good. The facts are not deeply engraved on my mind and I am so far at a disadvantage.

One day I went to see a cinema show. The subject of the film was the escape of Napoleon from Elba. The details were nicely got up and I enjoyed it so much. A new light was thrown on the life of Napoleon and a very interesting contrast was brought out before my eyes between the enthusiasm and the love of the French people for Napoleon then and their total absence after the battle of Waterloo. Near me was sitting a cloth-

merchant who however felt bored and loudly complained that his money was wasted that day. There were no thrills, no murders, no robberies, no detectives, not even love-making or elopement. The interest in a thing does not arise so much from the thing itself but from the back-ground of facts.* If the memory is not full and a suitable back-ground is lacking, no interest is possible.

In the Science room we often find that a very interesting experiment produces no response from the boys. The teacher blames the boys. "They are a dull, inattentive, careless lot," says he. The truth is that the back-ground of facts is wanting, and the boys cannot read in the experiment all that the teacher does. A coolie finds a fossil; he throws it away. The scientist picks it up and spends an hour over it. The memory of the coolie is blank, that of the scientist is live with numerous details. One is surprised to find that school boys as a rule know or knew almost nothing about the war that was raging for over four years. The cause lies in the new method of teaching Geography. "Why make them remember all the names? Teach them how the mountains grow and the rivers flow. Why it is hot in India and cold in England and so on," remarked the Inspectors year after year. Antwerp, Lille, Verdun, Warsaw, Brighton, Scarborough and even Serbia, Roumania, Gallipoli, were all to them as foreign as the words in the language of the Australian savages. It is no wonder they took no interest in the murder of the Austrian Prince, the rush of the Germans in France, or the complete conquest of Roumania, not even in the revolution in Russia or the abdication of the Kaiser. The back-ground to make these pictures interesting was wanting.

If I be permitted to use an analogy I should say memory is the foundation, while reason is the apex, of a pyramid. The wider and stronger the base, the higher and grander is the apex. If the foundation is neglected or is weak the apex cannot stand or at least is unstable. Of course the foundation may not be solid and may consist of arches leaving a number of open spaces; again the placing of higher layers need not be delayed till the whole foundation is complete. It may often be advantageous to arrange for a small pyramid first and come down if necessary to widen the base for raising the apex higher still. One thing however will now be granted that the rather wholesale condemnation of learning things by heart that we find in old authors was intended to create a prejudice against the mischievous practice of the Renaissance teachers. It is absurd to accept it in entirety and use it from a child of three to a research student of thirty. Good teachers have always accepted it at its proper value *but in this country it is not the teacher who controls education.*

Once we discard this too common but mistaken interpretation of a maxim sound within proper limits we shall be surprised to find that every good teacher in every good school is stimulating memory though he feels and says he is stimulating reason. He writes his steps on the blackboard. Why? The boys may remember them better. He uses coloured crayon that the boys may not forget and confuse the different sets of angles or lines. He draws a diagram and says thereby the details are better understood. What he really means is that they become better fixed in memory. Good memory, that is full memory, is an indispensable aid to good

reason and there is no other way to it. There may be difference of opinion about the ways of memorising facts. Some may prefer the crude method of frequent repetition; others may require more showy ways like pictures, tours and lantern demonstrations. There is however no escape from the fact that for proper reasoning there must be a strong back-ground of facts well remembered.

"Yes, you are right, we must remember things if we want to reason well and of course we may do it by the old method of frequent repetition if others are not available, but let there be no cramming, *i.e.*, let the boys not learn by heart what is not well understood." Once more we meet with a maxim only partially true.

When a child is born and sees things round about it and hears different voices, it first learns to imitate certain sounds. Child-psychology is an uncertain field but I suppose it will be generally agreed that for a year at least a child has but hazy notions of the correct connotations of the words it utters. The child *crams* certain words. Is it a mistake? No. The cramming is the basis from which the reason is stimulated. It is Nature's own method. When a new subject is to be learnt the student is just in the condition of a new-born child. For him a certain amount of preliminary cramming is inevitable. Our modern methods are giving unsatisfactory results, because we neglect this preliminary cramming.

What does a direct-method teacher do in his class? He gives the pupils a drill in a number of similar sentences so that *the form is thoroughly crammed*. Then he takes another set and then a third. In the beginning at least the pupils have no idea of the exact sense of the phrases learnt by them and

they are in no better position than that of new-born children prattling a number of sounds. It is cramming pure and simple, but it is necessary. This very gentleman however will scold a history teacher if he makes his pupils cram a few dates or a few names.

The dates and names of kings are like mile-posts. Their significance may not be well-understood in the beginning, but they have to be learnt. Without this back-ground any discussion of a historical event becomes meaningless. It is impossible. Year after year however our history-masters are asked by the so-called experts to achieve this impossible feat with results so well-known. "Why bother their heads with names and dates? Just teach them the interesting events and draw their attention to the lesson to be learnt from them." They forget that without dates the story is reduced to the level of a story in the Arabian Nights and the lesson loses its significance. The same is true about geographical names. They have to be remembered the first thing in Geography. They must be crammed if no better method of learning them is possible, but an expert once nearly fainted when I unguardedly expressed this view.

A faddist is an enemy of improvement, and an educational faddist is no exception. He dogmatically asserts the absolute superiority of his fad and in his opinion the fads of others must be worthless. Recently there has been a big crop of these gentlemen and their greatest concentration is against history and geography teaching. "Do not cram from books but learn from a map, a globe, a picture, a lantern-slide or a cinema film." I have shown above how a beautiful picture even will produce no image on a learner's

mind unless there is a properly prepared plate to receive the image. A picture *develops* an idea and *makes it firmer*, but is *not of much use for newly creating one*. For a beginner the word 'London' is perhaps as good as its picture or its map. He cannot read therein what we do. Coming after a little preliminary cramming they are valuable; without it the picture has no meaning in it.

There are some who admit the mistake committed in discouraging the memorising of facts and will say, "Yes, a few facts must be crammed when we are beginning a new subject, but let it be the minimum necessary. Let the children not cram things which they are not likely to use in their after-life." Who is to fix this minimum or the utility? I cannot say what a child is going to be, a mathematician or a judge, a demagogue or a statesman and therefore what right have I to select what is useful to him or to fix the minimum necessary?

Let me explain by a concrete example. In the Primary schools there is now a tendency to discourage the learning by heart of multiplication tables. Just a few are taught and they suffice in the lower classes. When however the boy goes to the High school he finds the base of his pyramid too small and he is at a disadvantage. He is slow in his calculations, and can work out only one example when he ought to do three. He takes awfully long time to write down simple results like $\sqrt{324} = 18$, $16 \times 2\frac{1}{2} = 40$, $\frac{1}{3} \times 9 = 3$, or $19 \times 7 = 133$. He knows how to get them but does not have them ready at the tip of his tongue. Not only does he lose his time but often he cannot visualise the next steps. In an expression like $\frac{138 \times 9 \times 11}{7 \times 23 \times 143}$ the boy who sees the

possibility of simplifying $\frac{138}{23}$ or $\frac{11}{143}$ has an immense advantage over one who does not and plods on through a long multiplication. It is now either too late for him to go down and widen the base of his pyramid or he does not feel the necessity. Again he has either no time or considers it too mean to do so.

How very convenient would it have been for him to learn them in his Primary school when the basis of his pyramid was being laid. "Oh, it is cruel to tax the brain of a child in this way," says a faddist with a shrug. Rubbish! *The cruelty does not consist in teaching but in examining*. The Primary schools have a fairly good method of teaching these tables. The table is written on the slate by the teacher. The teacher then reads it and the boy repeats it after the teacher and attains a certain amount of familiarity with the sounds and the figures. The table however is thoroughly fixed in memory in the evening recitations when the monitor says $29 \times 2 = 58$, etc., and the boys loudly repeat the same. The performance gives great pleasure to the boys and is the one most liked by them. There is no cruelty in it. The cruelty comes in when we examine the children, asking them all, questions of the same difficulty and detaining ruthlessly those who cannot answer. There are children who are more fortunate in their home-training and can easily concentrate their attention on a particular lesson; there are others who cannot. These latter take themselves mechanically through the evening recitations but it is hard for them to remember. It will perhaps be cruel to force them to learn either by punishment or by the incentive of a formal examination. It is best to leave

them there but it is unfair to bring the other lot down to their level.

A man is by nature fond of public applause and the educationalists as well as the politicians soon acquire the habit of speaking to the galleries. Three years ago in a Conference of Mathematicians, a well-known Professor of Mathematics ridiculed the present text-books of Arithmetic. "Who but a lunatic," said he, "will open the taps bringing water in simultaneously with those taking water out of a cistern? It is nonsensical to give such examples and make the boys work them out." This very gentleman that very afternoon was explaining to the boys of the Intermediate class how a tangent to a circle from a point within it intersects the circle in imaginary points. I do not know if he felt that his imaginary intersecting points were more absurd than the lunatic's opening all taps at once.

A great service was done to us by those who placed their fingers right on the defect in the old schools and said it was no use memorising things if we cannot use them for developing our reason. The cure was to encourage this use and not to discourage memorising. You cannot develop memory at the cost of reason, or reason at the expense of memory; *in a normal mind both must grow together*. In Primary schools where we are laying the foundation of knowledge the chief work will consist of memorising of facts, either by simple cramming or by pictures, or by stories, or by excursions. In the Secondary schools the pyramid grows into a decent form. For many this is sufficient; others prefer to widen their base still further and in the University build over it a gigantic structure. The loose talk of men

who pose as experts is just reversing this order of things. Time is wasted in Primary schools in teaching boys to reason without supplying the foundation. The reason never develops and the laying of the foundation is neglected. When the Matriculation Examination stares in the face, the boys see the blunder, discard the teachers' advice to the wind and rush to the cram-books and examination manuals with which the market is full. Hurriedly they prepare the foundation but it is too late to raise a structure, and even if one is raised the foundation is too weak to sustain it. The experts have ruined the prospects of these young men by their fads.

It is human to err, but the most deadly error is in denying that we ever erred.

M. R. PARANJPE.

THE SCHOOL ARITHMETIC

BEING SOLUTIONS OF THE QUESTION PAPERS SET FOR THE LOWER SECONDARY EXAMINATION FOR THE YEARS 1880 TO 1904

CHIEFLY INTENDED FOR THE USE OF PUPILS
OF THE 1ST, 2ND, & 3RD FORMS

BY

H. CHENNAKESAVA AIYANGAR.

Price—8 As.

SRINIVASA VARADACHARI & Co., MADRAS.

SCHOOL DISCIPLINE AS A FACTOR IN THE TRAINING OF CHARACTER.

DISCIPLINE is often lightly pitched from lip to lip. It is put in the same boat with punishment. But discipline is not necessarily punishment. It is the application of principles to incidental acts. One of these principles is obedience. A high standard of principle needs to be set up which will be of a kind that all creeds agree to it and can apply their own sanctions.

The Draconian rules or cast-iron military order and precision of by-gone days, that is to say, the German Drill Sergeant system of painful rigidity is not true school discipline. Draco, the notorious law-giver of Athens, is said to have written his laws not in ink but in blood, because every crime, the smallest lie (which might be the nearest approach to truth) as well as the bloodiest murder, must, according to him, be punished by death. Lycurgus of Sparta was equally severe to wean us from the true creed. In his age, the teachers of Sparta tried the strength of their rod on the poor pupils in season and out of season, and not unoften a lad would, without a cry, let himself be scourged to death. The Spartan lad stood rooted to his post and no word could part his lips, even when he was burned by a hot coal falling into his sleeve, or when the cruel teacher planted his foot on his breast or laid guilty hands on him.

Order has no right to be made hail-fellow-well-met with Discipline. Order says to a child, 'You must', Discipline teaches him to say, 'I will.' Let me explain what I mean by going back to a forgotten chapter of ancient

Indian Student life. Aruni, the model of a student in ancient India, unable to raise a balk so that water might not run out of the field, laid himself straight in the mud and water the live-long day without food and drink. Dhaumya's heart ached at the sight and he showered choicest blessings on him for willing obedience. Upamanyu, another disciple of Dhaumya, would smooth mountains for his preceptor and made game of all hardship even when his life was ebbing away fast. Dhaumya seemed to be elevated to the seventh heaven, proud of such a willing and devoted scholar at his feet and lavished his endearments upon him. Upamanyu's sight came back to him. He carved out a successful career for himself and seemed to tread on air.

We hear now-a-days a great deal of the slackness of discipline, want of self-control and decay of the reverential spirit in the life of a student of to-day, and the poor schoolmasters are held responsible for this lamentable state of things. But it is often forgotten that the most powerful agency in the child's development of character is the home. It is there that the warmest and most intimate affections flourish. The parents are the fount and source of all true education. The parents and the teachers, therefore, have to seek to understand each other's aims and to second each other's efforts so that the child's training of character may form an organic whole. Unfortunately, the old joint-family system has slackened; the home is no more the centre of attraction to growing boys which it once used to be, and in that way proved a check to such conduct as might bring disgrace to the dear old home. Thus the old bonds

Home discipline, a better factor in the training of character than school discipline.

of moral and religious sanctions are loosening and new ones have not yet got sufficient grip. So, the home, the most important factor in discipline and training of character, must be set right first.

Order is to the life of a school what food is to the life of a body. This order or discipline depends mainly on the personality of the teacher himself. Sir Rabindranath Tagore has chased away the shadows about its meaning. The teacher has to choose to lapse into a liking for the pupil. The teacher's heart has to feed on the pupil's image. At any rate, love has had to be drilled into the teacher, and a whole flood-tide of sunshine will gladden his beating heart. Love must disarm his anger; he must throw his arms across his pupil's lap and gather his pretty face to his shoulder to rule him well. Tears must gather in his own eyes if he wants tears to stream down his pupil's cheeks. To rule the pupils by love and not to sway them with an iron hand will alone lift the reproach of German Drill Sergeant system from the teacher. To some teachers wedded to old ideas this scheme of a rule of love is what the red rag is to the bull. The teachers should not set for themselves a strict rule of life and take endless trouble to train their pupils to observe the same rule. The land that non-chalantly permits a vast majority of its future citizens to be taught by immature and untrained teachers is not yet thoroughly alive to what is true discipline, true education. Our primary and middle schools which hold within their walls more than half of the school-going population are taught by the youngest, the most transient and the least well-prepared of our teachers. To belittle discipline has been

the vogue. To deliberately steel every crevice of his heart against the pupil, to look at him with an expression of face enough to turn a whole dairy of milk sour is supposed by many to be a good short-cut to order and discipline in schools. But a moment's thought will tell us that it is all moonshine. So I say that the personality of the teacher is of the highest value. Wise and successful teachers tune their lives into some feeble echo of the life of God. They are the character-forming agents working next to the parents. Love, the one vibrant tone to which the whole universe moves in tune, wells up in their heart, know as they do that it is better to be over-encouraging than to give no encouragement at all, or, worse still, to be a wet blanket to the pupil's aspirations. The teacher should be worthy of imitation by the scholars. What is wanted is that he must be a good governor like Dr. Arnold, not a despotic ruler like the Kaiser or the Czar. To govern pupils with the weapon of Love is, if not the easiest, the safest and surest way. To love the work, to love the school, to love the pupils must take the place of the present 'buy-and-sell business' of the school-master. Vile gold should never sway his best affections. True love never sails under false colours and is never lost. Love is not love that loves itself. Force repels, but love attracts. And yet love is a greater force. The influence of force would fade to nothing beside love's. Love wins where brute force fails. Manure the soil of the young mind with love and sow the seed of goodness upon it, the tiny seed will quicken into a tall stem rich with branches of bright foliage and scented flowers, "like the grain of mustard seed, which, when it is sown upon the earth, though it be less than all the seeds that are

Personality and love of the teacher—Indirect factor of discipline in the training of character.

Discipline vs. Punishment.

Discipline in ancient Greece.

Discipline vs. Order:

(a) Examples of ancient Indian students.

upon the earth, yet when it is sown, groweth up, and becometh greater than all the herbs, and putteth out great branches; so that the birds of the heaven can lodge under the shadow thereof."

The time is ripe for another radical change in the angle of our vision.

School Boys' Republic, an indirect factor in the training of character.

In this democratic age, every year we are marching in the track of centuries. The pupils have to feel that they

are free citizens at school as well as at home and the teachers have to develop among the pupils a spirit of self-respect. To appeal to the spirit of honour is to correct their shortcomings. Individuality, spontaneous effort, initiative must grow. These priceless possessions must not be overruled and crushed. The child is to be treated infinitely more than as a mere machine. Let him obey his own dictates, to be himself. His mind must be free. "Free-time" or "Do-as-you-like-time" is a healing balm for discipline. Every child makes something in his "free time" with dolls, paper, scissors and the like. This gives full play to the child's creative power during the interval or recess between the 'periods' in the time-table and affords openings for character-forming. To keep the children well-employed and to make a definite demand upon their powers is to kill all idleness in them and to tear them from their opportunity of wickedness. To arouse their interest and to stimulate their self-respect, let them have self-government, better known now-a-days as School-Boys' Republic. Guide them, as obtains in America, by kindness and honourable dealing and rely entirely on their public feeling. Experience tells us that of the four forms of government, anarchy, despotism, patriarchal government and self-

government, the last towers head and shoulders above the others. Let the classes choose from among themselves their leaders, to be called 'prefects' or 'monitors,' with duties to rule and guide, responsibilities to keep up the good name of their classes, and rights to bask in the sunshine of the teacher's favour. Let the prefect battle out the first fury of the pitiless storm in the class. His own appeal to the good sense of the good element in the class meets with a favourable reception, and then the opposition, reduced to a negligible minority, veers suddenly round to sweetness. To chase away resistance, to shed peace round a wagon-load of evil and warring elements in a class, and to bottle up all resentment, call aside one of the leaders in turn, make abundantly clear to him the whole state of the case in friendly manner and, if necessary, administer to him a mild rebuke avoiding anything in the nature of public censure. The teacher should put aside the idea that he is in any way the maker of the child's mind; no man can make a beech tree spring from an acorn or a rose grow upon the lilac bush, but a skilful gardener can make his flowers rich and beautiful and his trees straight and strong by the exercise of protection and care. The teacher has to cease to try to force the children into a mould and is to be content to let the mind open naturally, as the flower opens to the smile of the sun. Believe in the child. Honour and responsibility make even the troublesome pupils good and self-respecting. Where there is no responsibility there is no growth.

Of course, if a pupil is deliberately cross with the teacher, if he be in league with wrong and depraved spirit, the teacher

Direct school discipline.

must gradually but firmly correct it. The aim of all punishment should be not only

correction of a fault but prevention of its further occurrence. Punishment reforms the offender and warns others against committing the offence. As an empire obtained by force is cemented by gentle means, so a culprit humbled by the rod, or detention, or fine or an imposition has to be won over by love. The more tact, decision and dignity you have, the better will be the government of your school. And wed punishment to reward. Create a healthy atmosphere of work for work's sake. Reward for effort and punishment for lack of effort should be the twin instruments for good discipline. And, as prevention is always better than cure, the more we keep them engaged in honest work and innocent games, the more will the pupils wrench their hands from temptation. Outdoor games under proper supervision every afternoon are a pleasant change of occupation and build up character, and as the mind is not allowed to remain empty, Satan has no seat there. Above all, we must beware of Godless education. It is there where the shoe pinches. There is the rub. For the present system of education may not only bring one or two stray black sheep in the sacred fold but may convert the country into a land of slaves. Clear conscience and pure heart are banished in the struggle for existence in which even the pupil's self-respect capitulates; for our school education is divorced of morality and religion.

A few words about punishment will, I think, not be out of place. I am deadly against fine. It hurts only the pupil's parents and they are too weak to visit their loss upon the boy. If fine is bad, rod is worse. 'Spoil the rod and spare the child' is much nearer the truth. We have no right to visit on children the sins

of their fathers. Offences like unpunctuality and damage to school furniture may justify fines, to put the guardians straight with the world.

I would urge the greatest attention to strictness in minor offences, for thereby serious offences and serious punishments are avoided. A boy is inattentive in class,—is not punished; he next makes a noise,—is not punished; he disobeys an order,—is not punished; he is impertinent to a teacher: and is publicly thrashed. None of these things would have happened if the inattention and the noise had been sharply dealt with at the beginning. But, as it is, the lax discipline in minor matters in the schools encourages the boy from one thing to another, till at last he oversteps. Then he naturally feels that the punishment is an injustice. He asks, why should he be punished for this when for all the rest nothing happened? The parent takes it up: then there is a protest and a "golmal."

Character is a good or virtuous disposition of the feelings and will. Or, in other words, it is a completely fashioned will. Therefore, school discipline is a very important factor in the formation of character. But it is, as I have hinted above, only an aid. To let it rest on authority is to undermine it. Too much authority arrests the growth of character. So, I have endeavoured to lay much stress on Indirect Discipline: The Prefect System; The Assembly Parade; Drill; and Class movements. Direct Discipline of Punishment and Reward should be very sparingly handled. A harsh authority may produce a strong aversion to any form of discipline. Hence, we are to employ

What is character?

Punishment.

liberal discipline: Some expedients of it are:—Constant employment; close supervision; commands which should be few, well considered before given, positive rather than negative, general rather than particular and given once for all and with decision; Rules, the purpose of rules being the ultimate abolition of rules; exemplary and reformative punishment and reward for the honest effort rather than the result. Character-building discipline should also be *rational*, and should offer suitable opportunities for the exercise of the will. School discipline should be enforced as a matter of duty until it is kept from a sense of duty. Severity weakens the conscience. The greatest stimulus to goodness is goodness in others.

SASADHAR BANERJI.

BOMBAY UNIVERSITY EXAMINATIONS.

School Final 1923.

MATTHEW ARNOLD: SOHRAB AND RUSTUM, with Introduction and Notes, by RE. A. Mr. T. O. Hodges, B.A., Professor of English, Presidency College, Madras ... 1 0

B. A. 1923 and 1924.

SHAKESPEARE: MACBETH, with Introduction and Notes, by the Rev. J. Morrison, M.A., D.D., formerly Principal and Professor of English, General Assembly's Institution, Calcutta (College Classics) ... 1 6

—: MIDSUMMER NIGHT'S DREAM, with Introduction and Notes, by the Rev. R. Scott, M.A., Professor of English, Wilson College, Bombay (College Classics) ... 1 6

—: JULIUS CÆSAR, with Introduction and Notes, by Mr. Mark Hunter, M.A., Prof. of English, Presidency College, Madras (College Classics) ... 1 12

—: TWELFTH NIGHT, by Mr. Michael Macmillan, M.A., D.Litt., I.E.S. (Retired) English Lecturer in the University of Birmingham (Formerly Principal and Professor of English, Elphinstone College, Bombay) ... 1 12

SHELLEY: ADONAI, with Introduction and Notes, by Mr. W. E. Hoare, M.A., formerly Principal, Doveton College, Madras ... 0 10

MILTON: LYCIDAS, with Introduction and Notes, by Mr. N. Vaidyanatha Iyer, M.A., formerly of the Teachers' College, Saidapet ... 0 6

TENNYSON—GUINEVERE, with Introduction and Notes, by Mr. E. H. Elliot, B.A., formerly of the Presidency College, Madras ... 1 4

—THE TWO VOICES, with Introduction and Notes, by the same Author ... 1 4

M.A. 1923 and 1924.

SHAKESPEARE: OTHELLO, with Introduction and Notes, by Mr. Michael Macmillan, M.A., D. Litt., formerly Principal, Elphinstone College, Bombay (College Classics) ... 1 6

CHAUCER: PROLOGUE, with Introduction and Notes, by Mr. W. J. Goodrich, M.A., formerly Principal, Pachaiyappa's College, Madras ... 1 2

—THE KNIGHT'S TALE, with Introduction and Notes, by the same Editor. ... 1 2

SRINIVASA VARADACHARI & CO., TRIPLICANE, MADRAS.

THE TEACHING OF CIVICS.

ALL educational leaders recognise the supreme importance of Civics teaching in our schools. Nobody denies the need of rousing the spirit of patriotism and civic service in our pupils. That love of liberty should be inculcated from the very childhood of our future citizens will be admitted by all who desire the growth of perfect citizenship in the country. It is rather curious that promoters of education have not, as yet, secured for Civics its rightful place in the school curriculum. It would require several articles to argue the many questions in connection with Civics teaching and I propose to leave those questions aside. I assume that I am writing this for a public that believes in the need of Civics teaching.

The teaching of civics is a controversial matter, though we may agree that it should be taught in our Secondary schools. Should it be taught as a part of History and Geography or independently? Teachers of History and Geography, it is said, have ample opportunities of civics teaching and this indirect teaching 'is said to be sufficient for the rousing up of 'the civic self' in the pupils, there being no need of civics being given a separate place in the school curriculum. Practical teachers know how much of civics a boy learns when he leaves a Secondary school and how much even a College student gathers at the end of his University career. I am not sure that it has been adequately recognised in our schools. The civics that is taught in the elementary stages is practically not worth the name. A list of the officials of the place and their duties to be dinned into the tender memory of the children is not at all noteworthy and should not be tolerated any longer in

schools. In the lower secondary stages, for aught we know, most of the schools have no civics. In the syllabus issued for the teaching of Indian History by the Department of our Province, a few topics under the heading 'civics' are included for the second term lessons in the Third Form. It is exactly when teachers come to this portion that 'there is no time.' History and Geography lessons in IV, V and VI Forms too do not afford any scope for proper civics teaching. History and Geography too are undergoing their vicissitudes in these classes. The so-called 'B' Group History of V and VI Forms is neglected considerably, and the Department has issued a wide syllabus and expects four periods in V and VI Forms per week to be devoted to 'B' Group History. Most schools have three and many have only two, and if the teacher of the subject happens to take English, there is a tendency to utilise those periods often for the more important 'English.' The portion is not covered and the framers of the syllabus are blamed! How can we expect to give 'civics' to every boy? Some may raise this objection, perhaps. The 'Moral' Instruction Syllabus has a very good portion reserved for civics under 'civic' duties. Why is not this taken advantage of? We, on a searching of hearts, can recognise the futility of this argument and I leave out of account all that might be exposed in regard to this. So civics is not taught at all and even if taught, taught improperly, so improperly that it does not deserve 'taught.'

Civics should find an independent place in the pupil's time-table before he leaves the Secondary school and the Department should at once compel the teaching of the subject in every one of our schools, Elementary and Secondary. In the first grade Elementary

schools, a period or two might be *exclusively* devoted to the subject in the VI and VII Standards. In Secondary schools, we can begin from the III Form. A period in the III Form, two periods in the IV and V Forms, a period in VI Form [because of pressure of examinations] at least, should be devoted to the teaching of civics. However formidable the difficulties may be,—the pressure of examinations, the over-crowded timetable and so on—it is for the individual heads of institutions to adopt any fashion they like regarding details. In the Intermediate classes 'civics' should be one of the optionals and encouraged. It may go with History or Mathematics.

The object of civics teaching as far as that has been introduced into schools or embodied in text-books seems to be the imparting of information on the machinery of the local and central Government, its construction and working. Sometimes some additional matter on the 'rights and duties' of citizenship—often of a semi-ethical character, has been introduced. What educationists call as 'the useful information idea' has been the aim. To give an extensive knowledge of Government as complete and detailed as possible is our chief purpose. This too should not be deemed sufficient.

We agree that it is one of the objects of civics teaching to impart some knowledge of this kind; for a boy or girl who moves in any sort of educated society, who reads any modern books, who looks at a newspaper, who comes in contact with adult citizens at all, needs such useful information. But as an American writer points out, I am convinced, however, that civics teaching should find its central object and motive elsewhere; "not the *extensive* side of civic life but the *intensive*

should be its main theme." Unrealised though the *intensive* is by the great mass of the public, it is this *intensive* side which has been the object of contemplation and "a source of sweet delight" to the philosophers that have begun to understand 'the common life around them.' Neither the extensive nor the intensive side is realised by our boys and we should bear 'the intensive' as well in view.

What do we mean by this *intensive* side in civics teaching? What is its meaning and value?

A modern nation is not a mere collection of twenty, or fifty, or a hundred million individuals. 'It is composed of an endless series of groups;—some (cities, churches, pilgrim places in India) large, definitely organised and ancient; others (families—the family, the economic unit, schools and *patasalas*, mutts, social institutions) small, less definitely organised, and temporary. Every individual is a 'member of a number of these groups.' The basis of each group is in a common action. Each group finds its origin 'in a common desire of its members or of the nation at large,' and 'in the process of *willing* socially or in common to satisfy such a desire.' The school, let us say, is the result of a widespread desire for education and a common will among a group of parents or the citizens at large to provide it, and so with every institution. Each has a life-process. Circumstances change and the common will adapts the life of the group to the new conditions. Each group, industrial or otherwise, is organised to some extent; 'it has some machinery for discovering the common will.' It has some kind of officials to carry out its will and to adjust new conditions to old; a city for example has its Corporation, a town, a

Municipality, its own clerk and other officials, Magistrates, &c.

The whole may be summed up by saying that the central fact about the life we call "civic,"—that is, the life of organised and civilised society—is its organic nature. It is 'a unity in which the character and structure of the whole is repeated in every part.' Every part has its definite relation to the whole. A modern nation (and India is now undergoing a transition) is organised throughout on the principle of division of labour; each group has a special function in the body politic; each has (1) an origin, (2) an organisation the same in essentials, (3) a life process.

These common features of group life show themselves in the nation which is of course 'the group of supreme importance in the world,' as we know it now. The nation is the outstanding example of 'the common will'—'common life process' on a large scale—common organisation. The nation has a will—national will. Desire is at the root of will. It is a general desire for good living and "the common will of the nation is not directed to any particular end; it is capable of direction to any end; it is a sovereign will, in fact. This national will has taken to itself ink and paper; it is written down, printed and to be read and studied in numerous books; this is law. Law is not a fixed and final thing; it is changing, developing, daily and yearly; and this change and development is the result of the passing over into a more fixed and definite form of ideas to some extent already current in the mind of the nation, or efforts of the common will already in being. It is a crystallisation of public opinion and it has its allies and coadjutors in the expression of the common will,

those two staunch conservatives, custom and convention." This is the nation's will—nation's life process. The machinery for making up its mind is the nation's legislature, and the co-adjutors of legislature—parties, newspapers, propagandist bodies. The legislature is the *expressor* of the national will. To *carry out the will* we have our administrative and executive machinery—Ministers, Secretaries, Offices, Policemen, Postmen and all the rest. To *mediate* between the new and old and adjust individual and corporate life to the requirements of the national life and will, we have the *judiciary*, Law Courts, Judges, Sessions,—all the paraphernalia of the law.

The central problem in the teaching of civics therefore is to impart that view of the civic life as organic, simple and similar throughout of which the above is an imperfect sketch.

How is this to be done? In India we teachers should devote a special period to the study of the problems of civics teaching and begin to draw syllabuses suited to local conditions. An All-India Scheme of Civics syllabus cannot be begun and taught in the lower stages. We should not be satisfied with mere words. It is not any verbal knowledge that will do here. Even in the higher stages, it is easy enough to teach phrases like 'general will' and social will and the rest. We want something that goes far deeper—'a clear conception, a lively conviction, an intimate personal acquaintance.' We must follow the same rule always—start from examples of social willing and its manifestations known to the pupil himself—examples in which he himself takes a share and whose working he knows from the inside.

Every school, every form in a school, every set of pupils working regularly together,

every 'clique' or group of associates on the play-ground, the school cricket and foot-ball teams and so on—all these are social groups, each with its common and social will. A school society organised on democratic lines, in whose working all members take a share, is the best starting-point for civics teaching; any school which has not got such societies at work already should start one or more as a preliminary measure. In working as a member or official of such a society, a boy or girl begins to get a practical acquaintance with the workings of a common will and from this we can proceed to a general analytic treatment of civics. At such meetings, suggestions of action will be made by individual members; discussion will arise on these and opinions will be generally aired; a decision of some kind will be come to by vote; and the decision will in due time be carried out. Here we have, for our analysis the whole process of social action, which is closely parallel to that of individual action, as psychologists tell us: (1) *desire* leading to the discussion of diverse means of satisfying it; (2) *opinion* thus formed, coming to a head in decision or *resolve*; (3) *resolve* expressing itself in *action*. Once we grasp this and make our boys grasp this, we can illustrate the similar process going on in the school itself, in a district, a city, a county, a church, a friendly society—and in the nation itself. Further advance can be made by leading on to the conception of (1) *movements*, changes in political ideas, the formation of new parties and propagandist organisations, political and social agitations and so on; (2) the exercise of *judicial* functions, by referring to those of the President, Secretary and the Committee members of the School Societies; (3) the executive or administrative duties;

(4) the *resolutions* or legislative enactments. We can show then how these functions can be performed and are actually performed in the town, the city, the district, the province, the nation.

The aim of the teacher should be to produce a grasp of the elementary and very simple principles of social activity.

Thus both the Extensive and the Intensive side of 'national activity,' 'national organisation' should form the central aim of civics teaching. Within a few months we must organise a movement for this purpose and see that civics on proper lines becomes one of the very important school subjects. It is time we should think about this problem and keep up the two aspects—(a) to give the information that will be of most immediate use to our pupils; (b) to give that which explains the social activities with which they are in immediate contact. Boys and girls at 14 or 15 will probably have a fair amount of knowledge about the social life of the district they live in and evince a keen interest in some sides of politics and some social questions. Hence our business is easier.

I close this giving below a few hints given by an eminent educationist, and I am sure they may be of use:—

1. Contact with actual institutions is of the greatest importance. Why not start by ascertaining what your pupils actually have seen of our typical social institutions—factories, workshops; town-halls, churches, cathedrals; gas or electricity works; municipal baths (rare in our country), libraries, parks, tramways; Government barracks and post offices; light-houses and stations.

2. In many cases you will find that the interest aroused in the pupil by contact with such institutions will be an in-

terest in material things and mechanical processes, rather than in the social life of which they are the embodiment. You have to get your pupils into the habit of watching what goes on—of seeing movement, development, life, in each social organisation. The medium through which we ordinarily obtain is the newspaper and we ought to make considerable use of this in school to effect our object. Try getting your pupils to work on the newspaper on the seminar system; let one look out for items of interest in the work of the local authorities of your district; another might follow movements of our merchandise; a third might collect information about local festivals, movements of social life; another might follow a Bill through Parliament (Legislative Councils now in our country

also); there are endless possibilities.—Use simple blue books also.

3. Arrange for occasional special lectures by people who have done prominent civic service, or are specialists in particular departments of civics work—men of science, soldiers, social workers, municipal officials and numberless others.

One word more. We must not forget the *moral life* of the community to which ourselves and our pupils belong. Also there is the underlying idea of service, labour which is the basis and motive power of group and national life. Let, therefore, mutual service and love—the motive and reflection of corporate life—be the 'alpha and omega' of civics teaching.

V. RAJAGOPALAN.

A Manual of Arithmetic

By the late MR. S. RADHAKRISHNA AIYAR, B.A.,
Principal, Maharajah's College, Pudukotah.

Approved as a Text-book for all Classes and Forms.

Vide Fort St. George Gazette, 24th Jan. 1907.

Very useful for School-Leaving Certificate Examination

12th Edition (1921).—Price Rs. 2.

INTERMEDIATE EXAMINATION, 1923.

SELECT ESSAYS

FROM

ADDISON'S SPECTATOR

CHIEFLY THOSE RELATING TO SIR ROGER DE COVERLEY
EDITED WITH INTRODUCTION AND NOTES

BY

E. H. ELLIOT, B.A.

late of the Presidency College, Madras.

Price Re. 1-12-0. Charges extra.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

EDUCATIONAL INSTITUTIONS IN BURMA

The Cultural Side

BY ADAIR.

SCHOOLS in Burma have copied from the schools in England. This statement, of course, applies only to English teaching schools; for the Vernacular schools make no attempt at emulation. But the English teaching schools of both classes, those following the Anglo-Vernacular, and those following the English Curriculum, do try to follow the lead given by the schools of England, more particularly do they try to follow the lead given by those glorious old institutions, the greater Public Schools.

But Burma is not England, and so exact imitations do not exist and can hardly be expected. But what may be expected is not to be found. So far there is little likeness between the schools of Burma and the schools on which they are modelled. Burma is, after all, a very young country, and so has not had enough time to develop. The schools of England, especially the great public schools, are the outcome of centuries of development. There is then nothing surprising in the fact that, though the Burma schools (other than the Vernacular institutions) are modelled on British institutions, the two classes have not a great many features in common.

In the matter of location the schools of Burma resemble the Elementary, rather than the Public School type. Besides the Methodist School at Thandaung, the De La Salle Institute near Twante, the Government English High School at Maymyo and perhaps the Government High School for the sons of Shan Chiefs at Taunggyi, there is not in

Burma a single ordinary school situated away from the towns or not dependent for support on the population in its immediate neighbourhood. Like the Elementary school, the English teaching school out here follows upon the growth of population at a given centre and is usually a day school. Many schools have hostels but the majority of pupils are invariably day scholars. The schools named above are the only ones in which boarders preponderate and which can properly be termed Boarding schools. In England some Boarding schools take in day scholars. Here it is just the other way about: some day-schools take in boarders.

The boarding arrangements too are very often different. In Government institutions there prevails the hostel system, under which a large number of boys live together under a master who is the Superintendent of the hostel. This system obtains also at University College, Rangoon. Burmese students and parents alike would consider it the height of luxurious extravagance for separate rooms to be provided. Such provision, which is quite a common feature of school-boy and student-life in England, at least among the higher classes, is altogether unknown here. The Burman has not that ever-insistent craving for privacy, and fathers would no doubt complain if they were asked to pay for rooms for their sons.

Buildings in Burma have to suit the climate, and are necessarily different in appearance from English school buildings. Many being of wood are, of course, totally unlike anything in the West. Consider for instance how the building of University College would compare with Merton or Oriel. There are however individual schools whose style of architecture puts one in mind of the type of building we would expect to see in England,

St. Paul's Institute at Rangoon is one of these notable exceptions. But speaking generally it is true to say that our schools and colleges are not housed in such noble buildings as are calculated to inspire youth with lofty sentiments.

Being a new country the schools have no traditions; or, if they have, none of any long standing. They lack most of those things which help to build up and preserve the traditions of a school. Whatever traditions there are must therefore necessarily be in a languishing state. Usually a school in Burma has no uniform for its pupils, no school colours, no school cap, not even a school badge or motto. There is scarcely anything to bind the pupils together with the sentiment that they are all the children of the same *alma mater*. An annual Prize-Day is however usually observed. There is sometimes a school or college magazine, e.g., the Magazine of University College, Rangoon, "The Fleur de Lys" of the Diocesan Boys' School, Rangoon, and "St. Paul's Annual." That the publication of magazines such as these is regarded as something unusual, is indicated by the fact that each number is reviewed in the local press. There are also a few "old boys" associations connected with the larger and better established schools, but these are exceptions. The only thing which in any way binds one boy to another and to the school is sport. Sport, principally in the form of Association Football, has been successfully introduced into most schools; and, together with Scouting, which is just beginning to be generally taken up, it is the only saving feature in an educational world otherwise barren of those things, which, though based on so airy and fugitive a thing as sentiment, contribute so much to the building up of that

which is so solid, namely character. The school is merely a place where book learning is acquired. It has no record which its *alumni* can live up to, and consequently no hold on them. In Mission schools an endeavour is made, no doubt with varying degrees of success, to maintain a religious atmosphere, but otherwise there is little or no appeal except to the material side—cramming and passing examinations.

As already indicated, one of the causes of the state of things described is the fact that Burma is a young country, which has not yet had enough time. Another cause is that the managers and masters of schools are to a great extent birds of passage. This is especially so in Government institutions where the exigencies of the service demand frequent transfers. There can be no sort of doubt that lack of interest in the pupils is also one of the causes of stagnation. These causes necessarily affect one another, so that it is all wheel within wheel.

The Department of Education in the Philippines, under American administration, encourages sport not merely by expressions of approval but actively, for example, by issuing an official athletic handbook for schools. Similarly in the British Army since the end of the war there has been established an Army Sports Control Board by which life in the Army is to be made as bright and beautiful as sports and recreations can make it. Haphazard encouragement which formerly prevailed has thus made way for official recognition and help, which are now forthcoming as a considered policy. These are the examples to follow. An attitude of *laissez faire* is not according to the line of progress. There must be organization, if the cultural side of education

is to be developed and co-ordinated with the material. The situation in Burma presents a splendid opportunity for an administrator with vision. Up to now Government in the Education Department has had its hands full in building up the system of Vernacular education, in laying the foundations of the Anglo-Vernacular system, in devising means to meet the educational requirements of Europeans and Anglo-Indians, in starting schools where training of a technical nature is given, and in doing many other things culminating in the establishment of the University of Rangoon. But now that the spade work has been done, and the Reform Scheme is coming into operation, it is to be hoped that the Minister in charge of the portfolio of Education will see that this side of educational advancement, with all its elevating influences, receives due attention.

Third Edition—Just Ready—Price Re. 1-12-0.

A COURSE OF GENERAL MATHÉMATICS FOR HIGH SCHOOLS

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

Crown 8vo. 400 pages with over 195 diagrams

By V. RAGHUNATHA AIYAR, B.A., L.T.

Assistant, Teachers' College, Saidapet.

Approved as a Text-book for Schools under Public management,

vide Fort St. George Gazette, Part I-B, p. 641, dated 21-6-21.

Approved as a Text-book suitable for school use,

vide Fort St. George Gazette, Part I-B, p. 877, dated 21-9-21.

A Handbook of Manual Training or Educational Handwork in Paper and Card-Board Modelling

(in Tamil)

By S. YAGNASWAMI, Supervisor of Schools, Namakal.

Book I. Price As. 8.

SRINIVASA VARADACHARI & CO., TRIPLICANE, MADRAS.

Reviews and Notices

A NEW INDIAN ALGEBRA (VOL. II), BY THE LATE MR. B. KRISHNAMACHARI, M.A., UNIVERSITY PRIZEMAN IN MATHEMATICS. (SRINIVASA VARADACHARI & CO., MADRAS). Price Re. 1-8-0.

This volume supplements the information given in Vol. I of the book on Algebra written by the author. The author appears to have had the old S. S. L. C. Syllabus in Group C, Algebra, in view while sketching out the contents. Excepting a few portions which may be superfluous, in particular the arithmetic and geometric series, the book would well satisfy the needs of a High School pupil specialising in Mathematics. A working knowledge of the elementary principles of Algebra is given first and their application in science, etc., shown later. Separate treatment has been given to every important topic—homogeneity, symmetry, theory of divisors, etc. Copious examples are given in a well-arranged form. Problems not directly connected with the development of a topic in a particular chapter have been collected and given separately under miscellaneous examples. It is gratifying to note that the examples are not a mere copy of those given in foreign books. The problems have been well-adapted to Indian surroundings, thus justifying the title of the book. Test papers have been introduced in the right place. A judicious selection has been made from the questions given in various examination papers. The chapter on application to geometry is very unique and fruitful. Even the petty points that usually puzzle the beginners have received careful attention, e.g., the attachment of the sign $\pm$ in quadratic equations, etc. The general get-up is also good.

We cannot say definitely how the author would have improved the contents had he been alive. For our part we wish that he had treated 'Square Root' before 'Quadratic Equations' and had not inserted a separate chapter for huddling together the various cases of graphical solution. In spite of this defect we are glad to recommend the book strongly for the use of High School pupils specializing in Mathematics.

IN FEUDAL TIMES: SOCIAL LIFE IN THE MIDDLE AGES (TOLD THROUGH THE AGES SERIES), BY E. M. TAPPAN, PH. D. (GEO. G. HARRAP & CO., LTD., LONDON: 1921). Pp. 359.
INDIAN AGENTS: P.T.I. BOOK DEPOT, BANGALORE.

This book originally published in 1913 has been twice reprinted and in the second reprint

included in the *Told through the Ages Series*. It is not in any way an attempt to trace the complex political history of the Middle Ages; its plan, as the preface tells us, is to present pictures of the manner of life and habits of thought of the people in those Ages. The author rightly says—"Many of our thoughts and feelings, and instincts, of our very follies and superstitions, have descended to us from them. To become better acquainted with them is to explain ourselves. In selecting from the enormous amount of material, I have sought to choose those customs which were most characteristic of the times and which have made the strongest impression upon the life of to-day, describing each custom when at its height, rather than tracing its development and history." The numerous illustrations and sketches are largely reproduced from contemporary sources and old materials.

The first chapters describe the life of a page, developing into a squire and subsequently rising to be a knight; the arms and armour of the knight, the jousts and tournaments in which he indulged, the methods of escalade, assault, the battering-ram, the trebuchet, the mangonel, and the nature of naval warfare. The daily life in the castle, the feasting, the dishes used at table, the chief instruments of music, the songs of the minstrel and the troubadour, falconry and dancing; life in the manor with its round of agricultural service and feudal military service; the officials on the manorial estate, the peasants and serfs, the systems of cultivation—these are clearly described. Pilgrimages and Crusades, such as are described by Chaucer and the medieval chroniclers; the military orders, monks and monasteries, especially the Carthusians, Benedictines, Cistercians, and the later orders of Friars, the good work done by them and by the monasteries form interesting reading. Then we are led into the towns and their shops, fairs, crafts and guildhalls; we are told how goods were bought and sold at fairs and markets and by wandering pedlars. The schools and seats of learning; the Universities which developed out of them; the studies of *trivium* and *quadrivium*, the different kinds of students; the *Nibelungenlied* coming from Germany and Scandinavia, the *Cid* from Spain, the *Song of Roland*, the *Heimskringla* from Iceland—these and the chronicles of Froissart and others—the Italian Dante and the English Chaucer—all make life entertaining and rich in promise. Medicine and Alchemy, the wonders of the animal and natural world that prevailed, the architectural monuments and the works of art of the times have all their separate treatment; and we lay down the book

with a consciousness of feeling that the Middle Ages too were a time of changes and even of swift and mighty transitions. And "possibly the good folk of the Middle Ages have after all no especial need for our compassion."

EMINENT ORIENTALISTS: INDIAN, EUROPEAN AND AMERICAN. (G. A. NATHAN & CO., MADRAS, 1922). Pp. viii & 378. Price Rs. 2.

This little volume gives us the lives and accomplishments of twenty-five among the eminent band of European and Indian Savants who since the days of Warren Hastings and Sir William Jones have been working to unveil the wisdom of the East. In 1784 the Asiatic Society of Bengal was founded under the lead of Sir William Jones and throve under the guidance of Henry Thomas Colebrooke, H. H. Wilson and others. Nearly 40 years afterwards the Royal Asiatic Society was founded in London for the benefit of Englishmen who took an interest in Indian antiquities, philology, etc. Subsequently other societies, institutes and journals were created to satisfy the growing taste for Indian studies and to afford scope for the publication of the ever-increasing result of Oriental research, of which the first to be remembered is *The Indian Antiquary* founded as a monthly journal in 1872 by the late Dr. James Burgess. With the expansion of research and with the growth of scholars in both the hemispheres, the task of making a serious and systematic study of the achievements of researchers and scholars working, each in his own field and according to his own lines, has become exceedingly difficult for the lay reader. This volume has therefore done a great service to the reading public by giving it an account of some of the most eminent Orientalists.

The list of persons whose achievements have been studied includes great and honoured names like those of Jones, Colebrooke, Wilson, Fergusson, R. L. Mitra, R. G. Bhandarkar, Bühler, Monier Williams, Max Müller, Fleet, Tilak, Sylvain Lévi, V. A. Smith and others. Colebrooke's eminence; Wilson's services to the cause of the spread of Sanskrit; Max Müller's love of India; Fleet's enthusiasm in the cause of Sanskrit epigraphy; Monier Williams' attempt to make Indian culture a living force in life; Bühler's great service to the world of science in the editing of *The Encyclopædia of Indo-Aryan Research*; the pioneer critical works done by Indians such as Rajendra Lal Mitra, Telang, Bhandarkar and Bhau Daji; Fergusson's services

in proclaiming the value and worth of Indian architecture; the works of Griffith, Sister Nivedita and Sir Edwin Arnold, interpreters of the greatness of our poetry and ideals; the work of Anundoram Borooah, cut off by death prematurely; the comprehensive knowledge of ancient India possessed by Dr. Smith; the services of scholars yet spared to us like Keith and Levi—these are revealed in the book which has removed a long-felt want and which will doubtless make many of our young men appreciate more and more the services of these.

Doubtless, had the book been of larger size, it might have taken many more names which deserve and more than deserve to be taken in. To quote only a few from among the many names of scholars and workers whom we miss—Sir Alexander Cunningham, the originator of the Indian Archaeological Survey, to whom we owe the first Geography of Ancient India; men like Barnoof, Kern, Kielhorn, Hultzsch and Senart, all distinguished for their inscriptional studies; Professors Foucher, Grunwedel and Oldenberg; Dr. and Mrs. Rhys Davids famous for their Buddhist studies; Schroeder, Winternitz, Barth and Hopkins, Bohtlingk, Roth, Goldstucker, Grierson and Hoernle; and men like Sir Aurel Stein and Sarat Chandra Das who have done so much in the cause of searching out the relics of Indian civilisation in Central Asia and Tibet. Nor should we omit notices of men like Colonel Mackenzie who did so much to collect valuable manuscripts; and we in Southern India cannot forget the value of the works of Bishop Caldwell, C. P. Brown, Dr. G. U. Pope and earlier scholars like Rottler and men who long ago preceded them like Father Beschi and Father Nobili—men who may be fitly called the pioneers of Dravidian studies. It is hoped that in the coming editions the publishers will include detailed notices of some of these abovementioned names and at least references to the works of the others.

The estimates of a few figures seem to us to be unduly generous, in fact, exaggerated; but on the whole it is better in these matters to err on the side of generosity. This is specially marked in the account of Monier Williams and to a less extent in that of V. A. Smith. We should also point attention to the small typographical errors that have crept in here and there, e.g. *Prajna-Paramitha* for *Prajna-Paramita* (p. 109). There are also a few more serious errors, e.g. on p. 72, Dr. J. Muir of the Sanskrit Texts is confused with Sir William Muir, Lieutenant-Governor of U. P., Sister Nivedita's Footfalls of

Indian History is ignored in her treatment. We hope that these will be rectified and in a new edition, more balanced and proportionate attention and space will be devoted to the study of scholars connected with every department of Oriental life and thought. Proper stress should continue to be laid on that co-operation between Western and Indian scholars, out of which alone so much of abundant print we have reaped. Indian and European minds have both struggled

"To pierce the veil of mystery, that lies
On India's past so heavily, and cries
Aloud for rending with the searchers' shears."

READINGS IN ENGLISH SOCIAL HISTORY: FROM CONTEMPORARY LITERATURE, VOL. IV, 1603—1688. EDITED BY R. B. MORGAN. (CAMBRIDGE UNIVERSITY PRESS, 1922). Pp. xii & 106.

The aim of this series is to select from contemporary writers pen-pictures of the country and its people as they evolved through the centuries—their modes of life; their food and clothing; their games and recreations; their feastings and their burials, their methods of fighting on land and sea; their laws and customs; their education; their instinct for trade; their pageants and their music; their joys and their sorrows; and in fact all that goes to make what we call life. The extracts are taken from easily available editions of the authorities and the source of each extract is defined in detail. The illustrations are all contemporary and some of them are very curious like the Restoration Parliament taken from the frontispiece to a book published in 1660, and the Frost Fair on the Thames in 1684.

Archbishop Whitgift's princely life; the picture of a State festival and pageant by Sir John Harrington, the dedication of the *Authorized Version of the Bible*, with reproduction of its title-page (1611 A. D.); a description of English inns, taken from Fynes Moryson's *Itinerary* of 1611; James I's *A Counterblast to Tobacco*; description of Paul's Walk; the education of a Puritan lady taken from *The Memoirs of Colonel Hutchinson*; the good schoolmaster (taken from Fuller's *The Holy State*) whose functions were so slightly performed; an interview with Oliver Cromwell (taken from George Fox's *Journal*); and numerous extracts from Evelyn's *Diary*, Pepys' *Diary*; Burnet's *History of My Own Time*, *The Memoirs of Count de Grammont*; Sir William Petty's *Political Arithmetic* published in 1690; and *State Trials* of the various prominent

writers, Clarendon is remarkable for his admirable biographical sketches; Dekker is noted for his *Gull's Horn-Book* which is a curious account of contemporary London life; Overbury's *Characters*, being sketches of his friends and acquaintances; Stubbes, whose *Anatomy of Abuses* is a vehement denunciation of the luxury of his times; and the *Memoirs* of Ludlow, the *Familiar Letters* of Howell, etc.—these have been freely resorted to.

THE STORY OF ST. ELIZABETH OF HUNGARY, (TOLD THROUGH THE AGES SERIES), BY W. CANTON, WITH 8 COLOURED ILLUSTRATIONS. (LONDON: HARRAP & CO.) Pp. 218.

INDIAN AGENTS: P. T. I. BOOK DEPOT, BANGALORE.

St. Elizabeth, daughter of King Andreas of Hungary and betrothed in her babyhood to the son of the Landgrave of Thuringia, but dishonoured and widowed at twenty, dead at twenty-four and canonised four years later, is the subject of this biography which wants to keep green the rose legend of her compassion, piety and gentleness. A poor friar of the Dominican Order, Dietrich of Apolda wandered up and down the country, anxious to gather information about and write the life of this sweet saint; and wrote "searching out in all these matters the truth of the thing and striving for historic completeness." The life of St. Elizabeth inspired many another old writer in prose and at least one in verse. "And the charm of that most innocent soul, almost as child-like in its beauty at the close as it was at the beginning has not been lost upon our own time."

It was a time of the great *Minnesingers*, Wolfram von Eschenbach, builder of the heroic sagas of *Parzival* and *Titurel*; and Walter von der Vogelweide, sweet and prolific laureate of the school of love. It was also a period of great crusading enthusiasm, when even children turned Crusaders whom neither force nor persuasion could withhold from the march to the Holy City, when St. Elizabeth was always praying to the thorn-crowned King of Calvary. "The Secret of St. Francis was the secret of St. Elizabeth also. Like his—her life was sustained by a double joy—the joy of love and the joy of suffering for love." She had frequent fervid mystical experiences and always displayed a practical compassion for all who were poor and suffering and an inexhaustible charity. In a year of great hunger and famine she gave all the ready money in the treasury, threw open her granaries, distributed loaves in large numbers, and was present

everywhere, cheering, consoling, checking waste and sharply reproofing the idle and the vicious. Later after she became a widow she was thrust out from her husband's home. Once there was a talk of her marriage with Kaiser Frederick II; but Elizabeth would have none of it. She readily forgave her kinsmen all the wrongs they had inflicted upon her. After a few more years of suffering she died in 1231, scarce 24 years old; miracles were wrought at her grave; and her confessor Master Conrad began to collect the proofs of sanctity required for the enrolment of

her name in the Calendar of Saints; the task was completed by others. The bull proclaiming her canonisation was published in 1235 and it was acclaimed with great rejoicing throughout Germany. The life of such a sweet creature is loveable; and all the more so when it is put in such a charming manner and described with so much of sincere piety and love as by our author; and her memorial church still survives in all its pure Gothic beauty on the banks of the Lahn at Marburg—still the centre of a widespread veneration and pilgrimage.

DEDUCTIVE LOGIC

For Intermediate Students of the Indian Universities

BY

G. SATYANARAYANA MURTI, M.A.,

formerly Professor of History, Economics and Logic,

Findlay College, Mannargudi (Tanjore Dt.)

Price Two Rupees. Packing and Postage extra.

Copies can be had of

Prof. G. SATYANARAYANA MURTI, M.A.,

Palace Street, Parakkimedi (Ganjam Dt.)

or

Messrs. SRINIVASA VARADACHARI & CO.,

Mount Road, Madras.

The Educational Review.

The American papers are just reporting a striking incident **Never Too Old.** which carries the mind back to the times of the Renaissance in Europe, for parallel instances. We read that a Mrs. Crawford of North Carolina has just enrolled herself as an under-graduate of the Columbia University, though she is past the age of three score and ten! It is not that Mrs. Crawford has not had the benefits of University education and is anxious to compensate herself in the last days of her life, for some of the intellectual joys she has missed in her youth. Nearly fifty years ago she passed out of a women's college herself, taking her degree in the first class and is now anxious to go back to college only because her occupation is gone, all her six children having grown up and married and entered life! This incident has furnished the *Nation* with the occasion for some interesting reflections on the changed outlook which the grown-up person is sure to have, if he should get back to the surroundings and atmosphere of his college days with all the added experience of his mature life. "In his few middle-aged visits to the great English Universities," he says, "how often has the present writer's desire been the same!" How often as he watched the young men and maidens flocking to those halls and lecture-rooms which he himself when young did frequent, though not very eagerly—how

often has he longed to join them!....., Even examinations would be pleasurable now. Calculating the paper required for a room of a certain size, with so many windows, fire-place and cupboards, used to be a favourite trap set for 'Smalls', and he was nearly ploughed for getting the answer a square inch wrong. But now that he has papered or paid for the papering of many rooms, with what aplomb he could defy the trap! He was once quite undeservedly given a scholarship for a dozen sentences on the character of Hamlet, but now he could write a treatise on the subject that would make the examiners gasp in weariness and despair. One of the questions in his Final Examination was, "What is meant by life according to Nature?" He shirked it for fear of irresponsible frivolity; but now the schools themselves would hardly contain the volumes of his answer." It is an incident which ought to be known more widely over the world and serve as an inspiration to the younger generation in its pursuit of knowledge.

Presiding over the anniversary of the Government High School at Naini Tal; the other day, the Hon. Mr. Fremantle, C.S.I., had some very interesting observations to make on Indian education. One of the defects on which he laid special emphasis was the absence of *spirit* in the young people who are being trained in our schools and colleges. He notices a certain amount of depression and soft-

ness which he rightly considers to be unfortunate. It must be conceded that there is a large element of truth in Mr. Fremantle's observation, though the result is not due entirely to failings in our educational system and can be traced even to certain defects in the national life and temperament. The reasons are many: want of adequate attention to sports; precocious intellectual development; too much of reverence for authority, and rigidity of discipline imposed sometimes with all the callousness of a bureaucratic government; the tyranny of examinations; early marriages—all these and similar circumstances are responsible for a state of affairs which must strike any shrewd observer entering an educational institution in India. The average English lad at school or college, for instance, is buoyant and hilarious in the extreme and promises to enter life with an energy and zest which the average Indian boy is not able to command. Mr. Fremantle expressed his point by a very vivid remark which is worth quoting. He would not have been sorry, he said looking round, if some of the window panes in the school-building had been broken as the result of excess of spirit on the part of the boys! The older generation of Indian teachers are not likely to appreciate this standpoint, but it is an idea which carries with it a piece of serious educational criticism deserving the earliest consideration of our reformers.

Mr. C. F. Andrews draws attention in the columns of the *Modern Review* to the poverty of the circumstances of student life in some of the Universities on the continent of Europe and the picture painted by an American at the Marburg University quoted by him, will be read with great interest and sympathy in India where similar conditions are not unknown. The picture includes a reference to the circumstances of the teachers also:

"Some of the professors I know haven't enough money to buy decent paper upon which to write their lecture notes; rather do they buy up a sort of printer's waste paper printed on one side, with the other side free for lecture notes. For some of the best professors, it is difficult or impossible for them to go to a health resort when they are ill or go to the hills for a necessary vacation.

The situation for the students is even worse than among the professors. The existence minimum for a Marburg student was Mk. 1243 for the month of June, at the present rate equal to about 11 shillings. Personally I know several students who have incomes of less than Mk. 500 per month. In fact, one girl student living on the floor above me has an income from home of Mk. 100 per month and a student on the fourth floor—in the attic—has an income of Mk. 300 a month. The average income of the Marburg student, as compiled by very careful statistics of the Marburger studentenschaft is between Mk. 700—2000 per month. From Marburg University last vacation 214 students (or 10 per cent of the whole student body) worked full time on farms, in mines, factories or in trade, in order to earn money to study during the semester. As there seems to be a standing grievance between students and labor unions, some of the labor unions have protested against allowing students to

go into the coal and sulphur mines and thus competing against the labor union members. In this connection I might describe the work of the European Student Relief. This is affiliated with the Deutsche Studentenschaft and in every University town in Germany has organized a most efficient piece of Relief and Self-Help work. Here in Marburg there are two large Student Mensas, or Eating Halls, where the poor students pay Mk. 8 for each meal. The meal itself is about as meagre and poor as one could imagine, but hundreds of students are very glad of this help, thus enabling them to continue their studies. Besides the Student Mensas, the Studentenschaft has organized Co-operative Book Stores, and Libraries where needy students, on the payment of a small fee, are loaned the necessary text books for the term. The new plan of the Studentenschaft is to buy a large garden near the city, in order to provide vegetables, etc., at cheap prices to the Student Mensas and also to provide poor students with work. The whole Student Relief and Studentenschaft is based on the idea of Self-Help—is a model of efficient and extensive organization.

In the course of an interesting article on the *Need for a Liberal Education*, a writer gives an account in a recent number of the *Contemporary Review* of an interesting experiment carried on in England now for some years by Miss Mason at Ambleside. It is contended that the first discovery she has made is that children are very eager for knowledge and acquire a good deal of it themselves provided the right kind of books are placed at their disposal. "Given a book of literary quality suitable to their age," says Miss Mason, "and the children will know how to deal with

it without elucidation." She protests strongly against the intermediaries, "the watered compilations so dear to publishers and teachers." Even much teaching is discounted, because the teacher's is only "the obtrusive voice raised in well-meaning lecture that only interrupts." Here is a list of books prescribed for Form III, for children roughly of the age of eleven.

LITERATURE: Marshall's *History of English Literature for Boys and Girls*, pp. 581—632; *The Old Curiosity Shop*; *Hamlet* or the *Tempest*; Shelley's *Poems* (Oxford classics); Longfellow's *Hiawatha*; Lamb's *Essays*.

ENGLISH HISTORY: Arnold Forster's *History of England* (pp. 719—726 and 745—806.)

CITIZENSHIP: Miss Mason's *Ourselves*; North's *Plutarch's Lives*: Timoleon; Strachey's *Social and Industrial Life*.
etc., etc., etc.

This does not exhaust the list of subjects or the books of study. Among other books are such interesting ones as Ruskin's *Ethics of the Dust*, Bullfinch's *Age of Fable* and Longfellow's *Golden Legend*.

In some measure, there is the essential principle of the Montessori system in this, and the spontaneity and the provision for unfettered growth which one recognises in it so easily, are things worthy of commendation. The idea of prescribing inspiring books for the reading of children is not so common as one is apt to imagine, a look at the books

prescribed in our schools should convince one that much is not done in the direction. School books sometimes seem selected on the ground of their not being sufficiently inspiring and hardened school-authorities often seem to have little appreciation of genuine literature. Miss Mason's experiment would deserve appreciation at least on this ground.

The Educational Supplement of the London Times has an interesting discussion on the subject of the use of vernaculars as the media of instruction and examination in India, occasioned by the recent decision of the Senate of the Calcutta University on the subject. After stating various opinions advanced by Mr. Hartog and other educationalists who can claim to speak with some authority and experience of Indian conditions, the writer comes to the conclusion that the proper position is what was enunciated by the Calcutta University Commission's report: To use their mother-tongues for those dear and intimate things which form part of life from infancy upwards and which are the very breath and substance of poetry and of national feeling; to use English as a means of inter-communication necessary for the maintenance of the unity of India and of touch with other countries; for the mutual interchange of stimulation of idea in the sphere of scholarship and science and for the promotion of that inter-provincial and international commerce and industry

on which the economic future of India will largely depend.

The students of the pedagogic department of the University of Manchester have started a new practice which is probably worth some wider consideration. They have formulated from time to time suggestions for the consideration of their professors from the standpoint of students. The members of the teaching profession have often had occasion to discuss problems of educational interest relating to subjects like syllabuses, courses of studies and so on, but we wonder if they ever got the chance of looking at these questions from the standpoint of the students themselves for whom after all, all this bother is intended. Obviously, the opinions of students, immature as they are, cannot be allowed to regulate education by over-riding the judgment of those who ought to know better, but it is likely that the educationist will be saved from some bad mistakes by hearing what those who are being educated have to say in the matter. It was said some time back on fairly reliable authority that in some of the Bolshevik Schools in Russia, freedom had been evolved with such a vengeance that the students were allowed to administer the schools and one of their first acts was to dismiss teachers who did not take their fancies and close the schools for long terms so that they may enjoy nice holidays! It is of course not a state of things of that kind that will be advocated by those who wish to

take note of the students' standpoint in the work of education.

The increasing number of girls in our schools and colleges makes it essential that the question of games for girls should soon be considered and regulated carefully even in India. The following summary of the report of a very representative Committee appointed in England to consider the question will be read with great interest. The composition of the Committee and a description of its work will explain the high authority which its conclusions ought to command:

It contained representatives of:—

The Royal College of Physicians;
The Royal College of Surgeons;
The British Medical Association;
The Medical Women's Federation;
The British Association for Physical Training; etc.; etc.

Large numbers of people replied to the questionnaire and the opinions of the medical persons were dealt with by a separate Medical Sub-Committee and embodied in the general report. We give the summary below:

Among the schoolmistresses there was a general consensus of opinion that the effects of games and physical exercise on the disposition and character of girls are beneficial; but a small number thought there was a tendency to magnify the relative importance of games to the detriment of character.

The important question whether gymnastics with apparatus is suitable for girls was specially inquired into, and it was found that although about 66

per cent. of the schoolmistresses were in favour of such gymnastics, about half of those who approved were of opinion that there was special need for careful supervision if apparatus were used.

As to particular games, lawn tennis and netball received very general approval. Hockey, though approved by the majority of mistresses and students, was regarded by some as suitable only for the older and stronger girls, and by some as too rough or strenuous a game for girls. Cricket was very generally approved, but some doubted its utility as a game for girls. Football met with less approval than any other game; of fifty-two schoolmistresses who expressed their views on this game, only two were in favour of it, and among women students, though a few approved, many more objected to it on physical or other grounds. In general it was regarded as entailing too much strain.

With regard to other sports, swimming was generally approved. It was recognized, however, that this is an exercise entailing some strain on the heart, so that it is not suitable for all girls. The danger of heart strain was emphasized even more in regard to rowing, which, though approved by the majority of those who gave information on the subject, was thought by some to be too strenuous an exercise for girls in general. Racing in rowing was condemned by twenty-seven out of thirty-four women medical students. Cycling, provided it is in moderation and that the cycle is properly adjusted to the individual, met with a large measure of approval; but by some it was thought to cause round shoulders, and some schoolmistresses pointed out that when girls have to cycle too long a distance to school the strain makes them unfit for mental work.

Contests in games and sports were thought by many to require careful limitation and grading with the view of preventing overstrain. There was very general agreement that ill-effects would be less likely to occur from the more strenuous forms of physical education if previous medical examination

were more general. It was also suggested that the risk of ill-effects could be reduced if a short time was devoted to games or sports daily rather than a longer time once or twice weekly.

The medical members of the Committee, after consideration of the information from medical practitioners, drew up a report, in which they say :—

Suitable physical education, including games and sports, is as generally beneficial to girls as to boys. There is, however, need for discrimination; individual girls may be unfit for particular forms of exercise, and on this account medical examination as to fitness is generally desirable.

Among the particular games which the Committee had under consideration, viz., tennis, netball, lacrosse, golf, hockey, cricket, and football, only the last is considered unsuitable for girls. Of sports, swimming, rowing, cycling, horse-riding are all good for girls, provided that they are carried out under suitable conditions and excess is avoided.

Competitive games and sports are equally permissible, provided that they are undertaken with due regard to the fitness of the individual. Any game or sport may become unsuitable if practised in such a way or to such degree as to cause undue strain or fatigue. There is also a balance between mental exertion and physical fatigue, which cannot be altogether ignored. A girl who is working at high pressure for examinations may have to play games less strenuously. On the other hand, fatigue by physical exercise is a bad preparation for mental work.

With regard to gymnastics, whether with or without apparatus, there is no doubt of the value of disciplined exercises under expert direction as promoting the harmonious development of the muscles and preventing faulty position and carriage. The use of apparatus entails special care, as injurious effects may come from injudicious exercise of this sort.

An important question in connexion with the physical education of girls is whether and to what

degree there should be restriction of physical exercise during the menstrual period. Abstinence from games and sports has been very generally recommended hitherto, but in recent years evidence has been brought forward to show that these restrictions are harmful rather than beneficial. The medical members of the Joint Committee are not prepared at the present time to state any final judgment on the question, but consider that the evidence they have justifies more extensive trial of the voluntary continuance of games, sports, and gymnastics (swimming excepted) during the menstrual period.

Perhaps the most important point which arises in connexion with the physical education of girls is its influence in after-life, if any, upon motherhood. It is difficult to obtain conclusive evidence on this point. On the whole it would seem that there is no clear proof that strenuous physical education has any special influence either upon the prospect of motherhood or upon the difficulty of labour.

The Calcutta University has been the subject of a good deal of criticism and has provided material for a prolonged controversy over its Post-graduate teaching organization. The Council of Post-graduate Teaching is an organization which came into existence, more or less, as a result of the Universities Act of 1904. The report of the Raleigh Commission pointed out the defects that obtained in University education during the 40 years of its working, and suggested various remedies with a view to put University education on a better footing. The recommendations of this Commission resulted in a new Act, the Universities Act of 1904. This Act evoked a considerable amount of criticism at once as evincing too plainly

The Calcutta University and the Bengal Government.

a tendency to restrict higher education. Such criticism necessarily called for a vigorous defence and it was asserted that it had no such tendency, at any rate, the authors of the Act had no such object in view, as the only moving consideration in regard to the matter was the improvement in the quality of University education imparted. Sir Asutosh Mukherji who was one of the co-opted members of the Commission and who must have had first-hand knowledge of the tendencies of the recommendations, launched out into re-shaping the Calcutta University, when in consequence of the new Universities Act, he was appointed Vice-Chancellor of that University. He adopted a bold scheme of expansion of University education and organized various lines of post-graduate work, among which were the University Law College, University College of Science and the much-criticised Council of Post-graduate Teaching. In the earlier stages of this organization he has had to contend against the Education Department of the Government of India as his policy of educational expansion was regarded with no friendly eye of criticism in that quarter. The humorous portion of the controversy was that Sir Asutosh in season and out of season protested that he was simply carrying out the recommendations of the Universities Act of 1904; while the authorities at headquarters made it equally clear that his schemes had the opposite tendency to the recommendations of the Raleigh Commission. The struggle still went on

when after six years of Vice-Chancellorship Sir Asutosh had to give it up and other Vice-Chancellors took his place, successively in the persons of Sir Deviprasad Sarvadhikari and Sir Nilratan Sarkar. The University affairs still continued the same and had become more or less the cinderella of the Government of India so long as the Calcutta University was under that Government, and subsequently the Government of Bengal itself, till at last the Earl of Ronaldshay, the Governor of Bengal, with an insight into things, characteristic of him, sought the best remedy by persuading Sir Asutosh to accept again the Vice-Chancellorship, the best thing he could do under the circumstances, both from the point of view of the administration and from the point of view of the University itself. That let loose the hostile elements and the Calcutta University became the object of hostile attack from various quarters, perhaps for various reasons. The *Modern Review* took up the cudgel against the University and there was a time when almost every issue of it contained something or other against the University or its Council of Post-graduate Teaching. In this controversy Prof. Jadunath Sarkar took a leading part and has brought it down upon himself now that in the heat of the controversy, to which he largely contributed, his own good work gets underrated and his shortcomings prominently exhibited. The criticism of the *Modern Review* and attacks on the University by people like Prof. Sarkar called for a measure of defence as a necessity. Not

to be out-witted in this, the University has taken over the *Calcutta Review*, and almost every number of it contains some criticism of Prof. Jadunath Sarkar's attacks upon the University, indirectly illuminating the various dark corners in the work, and even the historical worth of the learned professor.

The constitution of the reformed Government of Bengal and the handing over of the Education portfolio to an Indian Minister gave rise to another body of hostile critics and what is worse a hostile Indian Minister. In response to a resolution calling for a Committee of Enquiry into the financial position of the Calcutta University, a call made on two separate occasions before by the Government of India itself, by Mr. Rishindranath Sarkar, the Minister let himself go and made remarks about the Calcutta University, which proceeding from a Minister ought to be considered irresponsible. The Calcutta University proceeded to appoint its own Committees to consider the criticism and the report before us is the Report of the Committee so appointed. The report traces the history of the new organizations attached to the University and concludes its criticism of the speeches in the Council both by the Minister and by the members, by calling for adequate representation on the Council of the University Senate, which according to them "must be regarded as a paramount and urgent need" so that the representatives of the Senate may "whenever occasion arises speak on its behalf with

knowledge and authority". This is a good idea and it would be worth while carrying it out for the reasons adduced by the Committee in the following sentence:— "For, even if we are constrained to admit that there may be, perhaps always will be, in all public assemblies some members whose acts and utterances may not be invariably inspired solely by a regard for public good, yet we feel confident that the preponderating majority, when apprised of the facts will resolutely refuse to lend their ears to tale-bearers, will fearlessly discharge the duties of their responsible posts, and will thereby justify the trust reposed in them." We commend the suggestion to our own University and make no apology for inviting attention to the speech of Dr. Hiralal Halder at the meeting of the Senate of the Calcutta University of the 29th of July last (printed in the last issue).

Speaking of our University in this connection we are put in mind of the discussion in the Budget meeting of the Legislative Council. Mr. O. Thanikachalam Chetty, M.L.C., calling attention to the work of the University in respect of the annual Government of India grant of Rs. 65,000, brought into the discussion the work of Professor S. Krishnaswami Aiyangar of the University. This discussion and the spirit in which it was conducted on all sides including the attitude of the Minister offer clear analogies to the attitude of the Calcutta Council towards the Post-graduate Council of the Calcutta University. It

is gratifying to see, at any rate, that the Calcutta University Senate proved itself equal to the occasion and by the appointment of Committees vindicated its position both general and personal. If Dr. Halder is surprised that a University should be discussed in the Legislative Council, the surprise is all the greater that the work of a professor should be discussed in the Council as was done in Madras. One of the members who argued against the motion said something by way of defence of the professor and his work, and slipped out a remark about the quality of his work, which, as it appeared at any rate in the papers reporting the speech, seemed something supererogatory for any member of Council to do.

For the information of the Council we publish the following review of the professor's latest work, "South India and her Muhammadan Invaders" from the *English Historical Review* for July 1922, by the eminent Professor of Arabic at Oxford, Professor D. S. Margoliouth. We offer our apology to the professor for taking upon ourselves the liberty, but offer it to our legislators in the public interest:—

"Perhaps it is not often realized that the sovereign under whom Muhammadan rule attained its furthest limits in India was not one of the Moguls, but Muhammad Ibn Tughlak, who reigned from 1324 to 1351. The process whereby Muhammadan invaders entered Southern India, the Sultanates which they established there, and the events which led to the termination of those Sultanates, constitute a subject well worthy of a mono-

graph, and Professor Aiyangar has provided one which is likely to win general recognition as a most valuable supplement to the chronicles of India. For the history of the Muhammadan conquerors, which occupies the second half of this volume, the Persian chronicles, with the narrative of the traveller, Ibn Batuta, form the main source of information; they are, however, supplemented, interpreted, and occasionally corrected from Indian Epigraphy and Numismatics, which serve as the chief source in the first half of the volume, wherein the political conditions of South India which preceded the invasions are described. In obtaining the archaeological results which are embodied the author has himself had a share.

"Great trouble has been taken by him to identify the localities named by his authorities and the varieties of pronunciation of the same names by different reporters make this a matter of great difficulty. Thus he unhesitatingly identifies the Chirichirapali of an inscription with Trichinopoly, which he makes the scene of battle stated by the Arab traveller to have been fought at Cobban. The latter is found by him in the name Kannanur-Koppam of an inscription, whence it would appear that Ibn Batuta's Cobban is the same as Kannanur.

"The first invasion of Southern India is described as a raid for the sole purpose of obtaining plunder; but when once this source of wealth had been tapped, it was natural that further drafts should be made upon it, and, as elsewhere, the prospects of the invaders were favoured by internal dissensions. They found, as others have found, that having invaded a country they could not easily abandon it, and the desire for plunder developed into imperialism. Among the motives which induced

these Sultans to endeavour to maintain their hold over the invaded countries was probably the sentiment that the Moslem communities whom they already found established would incur terrible vengeance after the invaders' departure. As happened in Spain and in Asia, with the weakening of the central authority, the newly-acquired territory split up into independent states; and presently somewhat as in Spain, though with differences,

the non-Moslem elements grew sufficiently strong to recover the country for themselves.

"The two hundred pages, of which this volume, apart from the appendices, consists, are very full of matter; and it is possible that, some of the author's conclusions, especially in matters of geography, may be questioned. There will be no doubt that he has contributed a chapter of the greatest value to the history of mediæval India."

Forthcoming Publications:

In the Press

A PREPARATORY ALGEBRA

BY

Mr. V. RAGHUNATHA AIYAR, B.A., L.T.,

Assistant, Teachers' College, Saidapet.

PRACTICAL MANUAL OF ENGLISH

BY

Mr. N. G. WELINKAR, M.A.,

New Edition—Entirely Revised.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

ENGLISH CLASSICS

Abridged and Adapted for use in Indian Schools.

 In each case the editorial work has been done very carefully, the text having been abridged by omission of passages of secondary interest. Further, wherever it has been found necessary, obsolete words and expressions have been replaced by their modern equivalents.

Gulliver's Travels, edited by Egerton Smith, M.A., I. E. S., Professor of English Literature, Dacca College. Price, Re. 1.

Robinson Crusoe, edited by Egerton Smith, M.A., I. E. S., Professor of English Literature, Dacca College. Price, Re. 1-4.

Vicar of Wakefield, edited by J. C. Rollo, M.A., Professor of English, University of Mysore. Second Edition. Price, Re. 1.

Lorna Doone, edited by F. R. Tomlinson, B.A., I.E.S., Professor of English Literature, Government College, Lahore. Second Edition. Price, Re. 1-4.

Pride and Prejudice, edited by Ferrand E. Corley, M.A., Professor of History, Madras Christian College, Fellow of the University of Madras. Price, Re. 1-4.

Bride of Lammermoor, edited by H. Martin, M.A., Principal, Islamia College, Peshawar. Price, Re. 1-8.

Hajji Baba of Isphan, edited by H. Martin, M. A., Principal, Islamia College, Peshawar. Price, Re. 1-8.

A Book of Golden Deeds, edited by Egerton Smith, M. A., I. E. S., Professor of English Literature, Dacca College. Price, Re. 1-4.

Ranglewood Tales, edited by P. E. Richards, B.A., Professor of English Literature, Islamia College, Lahore. Price, Re. 1-6.

COOPER—Publishers—BOMBAY.

UNIVERSITY OF MADRAS.

Intermediate Examination, 1923. RS. A. P.	
GRAY—ELEGY AND OTHER POEMS, with Introduction and Notes, by E. E. Kellett, M.A.	0 12 0
*TENNYSON—MORTE D'ARTHUR, with Introduction and Notes, by E. H. Elliot, B.A.	0 12 0
*—ODE ON THE DEATH OF THE DUKE OF WELLINGTON, with Introduction and Notes, by E. H. Elliot, B.A.	0 8 0
MATTHEW ARNOLD—RUGBY CHAPEL AND THE FORSAKEN MERMAN, with Introduction and Notes, by E. H. Elliot, B.A.	0 8 0
ADDISON—SELECTIONS FROM THE SPECTATOR, with Introduction and Notes, by E. H. Elliot, B.A. (Coverley Papers, &c.)	1 12 0
* Both the books together Re. 1.	
<i>Shakespeare—Richard II.</i> , with Intr. and Notes, by Prof. J. C. Rollo, M.A., Mysore University.— <i>In the Press.</i>	
Intermediate Examination, 1924.	
MILTON—L'ALLEGRO AND IL PENSEROSO, with Introduction and Notes, by A. J. Grieve, B.A.	0 10 0
WORDSWORTH—SELECTIONS CONTAINING RESOLUTION AND INDEPENDENCE, AND OTHER POEMS, with Introduction and Notes, by E. H. Elliot, B.A.	0 12 0
TENNYSON—SELECTIONS containing MORTE D'ARTHUR, OENONE, ULLYSES, AND SIR GALAHAD, with Introduction and Notes, by E. H. Elliot, B.A.	0 14 0
TENNYSON—LOTOS-EATERS, with Introduction and Notes, by E. H. Elliot, B.A.	0 4 0
—POEMS, containing MORTE D'ARTHUR and ODE ON THE DEATH OF THE DUKE OF WELLINGTON, OENONE, ULLYSES, THE LOTOS-EATERS AND SIR GALAHAD. Red Letter Library. Cloth bound. Reduced to	0 12 0
B.A. Degree Examination, 1923	
MILTON—COMUS, with Introduction and Notes, by Dr. S. Sathianadban, M.A. 2nd edition	0 12 0
CARLYLE—HERO AS MAN OF LETTERS, with Introduction and Notes, by E. E. Kellett, M.A.	0 12 0
SPENSER—PROTHALAMION, with Introduction and Notes by E. H. Elliot, B.A.	0 10 0
LESLIE STEPHEN—JOHNSON, English Men of Letters Series. Paper cover	0 9 0
—Cloth	0 13 0
CARLYLE—HERO AS POET, with Introduction and Notes, by the Rev. S. Gnana-muthu, M.A.	0 8 0
B.A. Degree Examination, 1924.	
SPENSER—PROTHALAMION, with Introduction and Notes, by E. H. Elliot, B.A.	0 10 0
MILTON—COMUS, with Introduction and Notes, by Dr. S. Sathianadban, M.A. 2nd edition	0 12 0
POPE—RAPS OF THE LOCK, with Introduction and Notes, by E. E. Kellett, M.A.	1 0 0
BROWNING—SAUL, with Introduction and Notes, by C. H. Payne, B.A.	0 12 0
*WORDSWORTH—SELECTIONS, containing On Revisiting the Wye above Tintern Abbey, Ode to Duty and other poems, with Introduction and Notes, by E. H. Elliot, B.A.	0 14 0
*WORDSWORTH—SELECTIONS, containing ODE ON INTIMATIONS OF IMMORTALITY, and another poem, with Introduction and Notes, by E. H. Elliot, B.A.	0 12 0
CARLYLE—HERO AS MAN OF LETTERS, with Introduction and Notes, by E. E. Kellett, M.A.	0 12 0
* Both together Re. 1-4-0.	
Other Intermediate and B.A. Books.	
INTERMEDIATE GEOMETRY (Theory and Practice) by M. Satyanarayana, M.A., L.T., and K. S. Patrachariar, M.A., L.T. 2nd and Revised Edition	2 8 0
THE STUDENT'S COMPANION TO GEOMETRY, for the Intermediate Examination of the University of Madras, under the New Regulations, by K. Deva Rao, B.A., L.T.	0 8 0
EXAMPLES ON TRIGONOMETRY, containing the F.A. Trigonometry Papers for 15 years, 1888 to 1902, with Solutions of all the Problems, by P. A. Subramania Aiyar, B.A., L.T.	0 8 0
EXAMPLES ON ALGEBRA, containing F.A. Algebra Papers for 17 years, 1889 to 1905, by the same author	0 8 0
INTERMEDIATE CHEMISTRY, by P. Lakshmi Narasu, B.A., Professor of Physical Science, Pachaiyappa's College, Madras.	3 8 0
INTERMEDIATE PHYSICS, by the same author.	4 0 0
LECTURES IN LOGIC, by Rao Bahadur S. Mangesh Rao, B.A.	2 8 0
STUDENT'S HAND-BOOK OF PSYCHOLOGY, by the late Dr. S. Sathianadban, M.A., LL.D. (2nd Edition)	1 0 0
QUESTIONS AND ANSWERS ON ELEMENTARY LOGIC, by M. Macmillan, M.A.	1 0 0
THE ELEMENTS OF HUMAN PHYSIOLOGY, by G. S. Ramasami Aiyar, B.A.	1 0 0
B.A. EXAMINATION ENGLISH LANGUAGE, LITERATURE AND COMPOSITION PAPERS of 1881 to 1906 (both inclusive)	0 5 0
F.A. MATHEMATICS—ALGEBRA AND TRIGONOMETRY PAPERS, with Solutions and Notes from 1901—1903, by B. Hanumanth Rao, B.A.	0 4 0
MINTO'S LOGIC—INDUCTIVE AND DEDUCTIVE, 5th Impression, Rs. 3-6-0. Reduced to	2 4 0
ROBINSON—SHORT HISTORY OF ROME—Rs. 2-10-0. Shop soiled, reduced to	1 0 0
FAWCETT—MANUAL OF POLITICAL ECONOMY. Rs. 9 0-0, Reduced to	4 0 0

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

The Educational Review

A Monthly Record for India.

VOL. XXVIII.]

OCTOBER 1922.

[No. 10.]

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

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

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

UNIVERSITY OF MYSORE :

CONVOCATION ADDRESS

BY

Manir-ul-Talim H. J. BHABHA, M.A.

I ESTEEM it a great honour and privilege to be invited from my seclusion to deliver an address before this Convocation. The higher the honour the greater is my diffidence to appear before you after the eminent educationists who have given excellent addresses on previous occasions. I fear I was somewhat hasty when I accepted the invitation from a sense of duty to obey His Highness the Chancellor's wish which was to me a command rather than from any exaggerated feeling of self-esteem. I have put together a few thoughts that have struck me from a distance, for the expression of which I beseech your kind indulgence.

When shortly after my retirement from the Educational Department, over which I had the honour to preside for a period of twenty years, it was decided to establish the Univer-

sity of Mysore, I heard the news with feelings of great gratification. That the department which had been built up with strenuous exertion for a long series of years was to be crowned by a University naturally filled my heart with joy and pride. The wisdom of having a University of our own which had long been looked forward to cannot be doubted. The Colleges which had been affiliated to a distant University naturally would benefit the most by the establishment of a local University of which they would be integral parts, and in the management of which they would have a leading part. The curricula and schemes of examinations instead of being superimposed by a distant and sometimes unsympathetic body would be arranged to their own satisfaction by the local Professors on well-thought-out lines. It is a great thing for a people to have a Teaching University of their own in direct sympathy with their wants and aspirations, so that they may have the kind of education they esteem most advantageous to their interests. No

system of education can flourish so well as that which satisfies the needs and wishes of the people. Such a Teaching University does away with the disadvantages of external examinations and brings students and professors into intimate connection, so that cramming of the worst kind is effectively discouraged and real progress and scholarly knowledge are encouraged, while at the same time physical education and the training of character are attended to with great care. The University of Mysore, though it cannot strike out any great departures from the beaten track of older Universities, will be free to encourage the study of Kannada, Sanskrit and Persian in a satisfactory way, to foster the growth and publication of a modern Kannada literature without which the education of a whole people cannot proceed, to promote the study of such new objects and provide such practical training as may satisfy the aspirations of the people and suit their economic and social needs, to form schemes of its own of female education and oriental learning, and to arouse patriotic love within the hearts of the people for a system of education which is under their own control. There is further no agency so powerful as a local University for extramural instruction, for not merely organising what are called Extension Lectures but regular schemes for adult education for giving instruction up to the level of University standards to people whom circumstances have not permitted to acquire higher education but who have the desire and ability to profit by it. These are no small advantages, and that they are now available to the people of this State presages a bright educational future for them.

The Mysore State has always been distinguished for its earnestness and liberality in

promoting education. No Native State or Provincial Government in India has been able to spare such a large proportion of its revenues for education as the Mysore State. This is hardly a place for giving comparative statistics, but your Educational Department can easily prove that the proportion of total revenues spent on Education in Mysore is the highest of any province in India, though it may be much lower than in the advanced countries of Europe and America, and Japan. In an advanced State like Mysore a University was bound to come, and though some publicists may be tempted to be critical and look askance at the commencement, when in a short time it has proved its great usefulness, it will disarm all criticism and ungenerous comments.

One of the principal advantages of having a Teaching University of our own is to have a full time Vice-Chancellor who watches over the instruction and discipline of the students, their physical welfare, their corporate life and intimate connection with their Professors. I may be excused however if I refer, for a moment to a possible danger, though it should be very unlikely, of the sense of responsibility of the Heads and Professors of Colleges getting weakened for the maintenance of discipline and the training of character. The authorities of a college should be solely and wholly responsible for the internal discipline of a college, and the bonds between the Professors and pupils should in no case get weakened. It is the personality of the teacher that exercises the most potent influence over the character and manners as well as the intellect of the pupil. It would be a misfortune if this influence became less for any reason.

It is often asked what is a University and what are its functions. Cardinal Newman in his eloquent language gives a definition which can bear repetition :—

"If I were asked to describe as briefly and popularly as I could what a University was, I should draw my answer from its ancient designation of a *Studium Generale*, or 'School of Universal Learning.' This description implies the assemblage of strangers from all parts in one spot—from all parts; else, how will you find Professors and students for every department of knowledge? and in one spot; else, how can there be any school at all? Accordingly, in its simple and rudimental form, it is a school of knowledge of every kind, consisting of teachers and learners from every quarter. Many things are requisite to complete and satisfy the idea embodied in this description; but such as this a University seems to be in its essence, a place for the communication and circulation of thought, by means of personal intercourse, through a wide extent of country.....A University is the place to which a thousand schools make contributions; in which the intellect may safely range and speculate, sure to find its equal in some antagonist activity, and its judge in the tribunal of truth. It is a place where inquiry is pushed forward, and discoveries verified and perfected, and rashness rendered innocuous, and error exposed, by the collision of mind with mind, and knowledge with knowledge. It is the place where the Professor becomes eloquent, and is a missionary and a preacher, displaying his science in its most complete and most winning form, pouring it forth with the zeal of enthusiasm, and lighting up his own love of it in the breasts of his hearers. It is the place where the catechist makes good the

ground as he goes, treading in the truth day by day into the ready memory, and wedging and tightening it into the expanding reason. It is a place which wins the admiration of the young by its celebrity, kindles the affections of the middle-aged by its beauty, and rivets the fidelity of the old by its associations. It is a seat of wisdom, a light of the world, a minister of the faith, an *Alma Mater* of the rising generation. It is this and a great deal more and demands a somewhat better head and hand than mine to describe it well."

Although in the above definition a University is defined as *Studium Generale*, that is, a School of Universal Learning, it does not follow that every University should teach every subject. The expanse of knowledge is so wide, the number of sciences and their sub-divisions is so large that it is impossible for any University in the world to attempt to teach them all, and the resources of no State would suffice to maintain such a University. For a new University like Mysore, which is not endowed but is maintained wholly by the State, it is safest to limit its functions at first to an irreducible minimum of subjects. We must have Languages and their Literatures; in our case English, Sanskrit, Persian, Kannada, other Vernaculars and French; we must have History, both Ancient and Modern, Philosophy, Mathematics, and Physics and Chemistry. We have already in addition to this irreducible minimum of subjects Economics, Commerce, Engineering and the natural sciences of Geology and Botany.

It is no doubt a disadvantage that the departments of Science and the Humanities in the Mysore University are placed at a great distance from one another and constant

intercourse between students of both departments is not possible. There is no advantage so great in a University as the constant interchange of thought between students of Science and Engineering on the one hand and those of Literature, Philosophy and History on the other. A means of lessening this disadvantage is to bring about friendly meetings in rival contests of games, debates, lectures, and social gatherings. A social week in Bangalore and another in Mysore in different parts of the year for the students of both sections would combine pleasure with instruction. Such interchange of ideas removes narrow-mindedness, broadens the intellectual outlook, and produces a real world of culture and liberal learning.

Everywhere the addition of new subjects to the programme of studies depends on various circumstances, on geographical position, on a donor appearing with a handsome endowment, on an eminent teacher rising in our midst to whom students flock in large numbers and who can lead them on to advanced studies and research. As for endowments India is essentially a poor country, and we have hardly any Rockfellers or Carnegies among us. The Calcutta University is the only University in India which has been fortunate enough under the enthusiastic advocacy of Sir Asutosh Mookerjee to obtain large endowments from leaders of the bar and from Zemindars of Bengal. Even Bombay with its merchant princes has not shown yet anything more than a long list of scholarships and prizes as Mysore has already begun to show. But scholarships and prizes are not endowments for chairs, laboratories and libraries. Until the endowments come the expansion of the University has to wait, unless the State can

without injury to other interests spare more funds and can take up the additional burden. But when they come sooner or later as they are bound to do in the case of Universities admittedly doing good work, the choice of new subjects will depend upon various circumstances, geographical, economical and social. In the case, however, of subjects like mining and metallurgy it would perhaps be more advantageous to found scholarships to enable selected students to go to well-equipped European Universities of established reputation in the teaching of mining and metallurgy like Birmingham, Manchester, Sheffield, or to America than to have costly technological departments of our own. Agriculture and the sugar industry which are of great importance to the country should claim the first attention and also suitable subjects of applied chemistry like the chemistry of fats and oils, lac industry, of dyes, gums, resins and varnishes, etc. With the Indian Institute of Science close at hand which is handsomely aided by the Mysore State, important help can always be obtained in technological subjects from that Institute which is being re-organised at present on improved lines.

Before the further addition of other faculties and subjects to be taught by the University is discussed, it is to be hoped that the question of having honours courses separate from those of the ordinary degree in Arts and Science will be taken up in earnest. I believe it has been to some extent already discussed. But unless a clear distinction is made between the courses for an ordinary degree and those for an honours degree, the student of exceptional talents will not be distinguished from another of average abilities, nor can the former be encouraged

to do his best without such differentiation. Such a want of opportunity to excel given to students of excellent abilities is so much loss to the University and the country. The Madras University has set a most admirable example by providing honours courses which may be followed in Mysore. Moreover research work and training in the methods of research are the most important functions of a University which are best carried out when there are honours courses.

Though the number of faculties and subjects may perforce have to be limited in a young University, what is perhaps the most important aspect of University education must not be undervalued or forgotten. University teaching especially in a unitary University like Mysore exercises a most powerful influence on the character and manners of the students. It is the character-forming influence of University education which is perhaps its most valuable part. A student may not on leaving the University find lucrative work which will rapidly advance his material interests, but his help and company will be sought after as of one who can always be relied upon, whose character is unimpeachable, whose lofty aims, self-sacrifice and readiness to help his neighbours and hatred of all meanness distinguish him from his less fortunate brethren. A residential and unitary University gives such scope to high-minded professors and tutors for the exercise of elevating influence on their pupils' character and manners as cannot be found in any other educational institution. These influences exercised in an unobtrusive way leave a stamp on the mind and manners of young men which lasts a life-time. It is in the University that young men have an opportunity of learning industrious and persevering

habits, and that intensive love of work which ensures their success in life. It is in the University that they receive those humanising influences which broaden their outlook on life, and give such an insight into human nature as renders them worthy leaders of men in future. The material result of University education at the commencement of life may be small, but their moral elevation is their best reward. I am glad to say that the educated Mysorean is already making a good name for himself in other parts of the country. Respectful, obedient and of gentle manners he has by his keen sense of duty and devotion to work already won golden opinions wherever he has found work. There is no doubt that our educated men have often long to wait for adequate recognition of their merits from a material point of view in a poor country like India. The number of careers open to the best products of University education in India compared to those open to similar men in more advanced countries are, it must be admitted, very few, and cause anxiety to them and their parents who at great sacrifice have given them higher education. Until the economic state of the country improves by the development of trade and industries, the opportunities of fairly remunerative employment will, I fear, remain limited. The University cannot increase these opportunities. It can only help to a limited extent by shaping its courses of instruction so that they may suit the nature of employment in trade and industry. While a highly-educated Englishman can find a career in the Church or the Army or in the higher administrative branches of the public service both at home and abroad, Indian youths have no similar openings. The higher grades of Engineering, Medical and Civil

services are in British India mostly filled by Englishmen. In an enlightened Native State like Mysore however the higher grades of service are happily open to Indians of high education, but the number of well-paid posts is necessarily limited in the State. The only careers usually open to an ordinary graduate are the lower grades of the civil and administrative services, at the bar, and in the Judicial, Public Works, Medical and Educational Departments, and in other kinds of work which require literary ability and high character.

In industrial concerns there is a popular prejudice, which is often justified by facts, that a highly educated man is unpractical and not suitable for employment. Want of manual training in the education received at school is often his misfortune. A natural or inherited dislike of practical work which requires the ready use of hands is a great hindrance to admission to the avenues of industry. Unless such a man begins his career on the lowest rung of the ladder, he gets no chance of rising in industrial pursuits. But when once he has established his footing he can rise rapidly by his intelligence, ability and character above a number of ill-educated competitors. It is false pride often to refuse to make a modest beginning. Most young men have to learn that though they may be trained in theoretical science, in all industries requiring practical skill they have to commence work low down in a factory. The scientific training gives him an advantage over uneducated workmen, and as he understands the reason of every process and can use his resourcefulness in time of need, he rapidly proves his superiority and may rise in a short time to the highest controlling post from very modest beginnings.

This is a lesson in life which most of our educated men ambitious of a practical career have yet to learn.

Distinguished students in Europe and America on completing their courses of higher engineering studies at a University find it necessary to pay high premia of two to three hundred pounds a year for two or three years in order to apprentice themselves in great engineering or manufacturing works to acquire practical experience, and in such works they commence in the lowest grade and rise step by step through all the stages of work. It is such men that achieve success in their profession. During this apprenticeship they are subjected to severe discipline and have to obey the orders of their superiors implicitly although these orders may have the appearance of being inconsistent with the theoretical teaching they have had at college. They also learn how to handle labour as they rise to positions of responsibility, in which they have to control the actions of other workmen, and at the same time they acquire tact in dealing with their associates as well as their superiors. A man who is always at variance with his colleagues cannot be chosen by his superiors to fill positions of trust and responsibility. It will thus be seen how essential practical training is and how a successful industrialist should acquire all these practical qualifications after completing his theoretical course. It is true that great Engineering Works are few in number in India and earnest students may have to go to Europe or America for such apprenticeship. But the best use should be made of the existing works in India.

What is true of engineering students is also true of scientific students who are eager to rise in industrial pursuits. And the same thing

is *mutatis mutandis* true of the literary scholars turned out by the University. They have to commence life in these days of keen competition in humble positions in the hope of future advancement unless they are blessed with means which make them independent. The struggle in life is growing on every side and in a poor country like India it is at its worst.

I refer to the difficulties of finding a ready career immediately after completing a course of University education, even in the case of those who have gone through a highly scientific training, not with any idea of discouraging the students but only as a warning against possible disappointment, and to invite attention to remedies or rather palliative measures under the existing circumstances. There is nowhere in India such eager desire to obtain the highest education obtainable as there is among the people of Mysore, because the intellectual classes have no other avenue to success in life except through higher education. Mysore being an inland Province has hardly any commerce, all its trade being an exchange of its raw products with neighbouring parts for what is necessary to supply its limited wants. Industries have not been developed and the country on the whole is poor, and its wants are few. Under such circumstances higher education is the only resort of ambitious young men. The lure of higher education attracts all men that possess some ability, and consequently there is a tremendous rush of students knocking at the door of the University for admission. The numbers of students in the Maharaja's College and the Central College which were 275 and 313 in 1916-17 have risen in five years to 518 and 359 respectively, the admission into the Science classes of the

Central College being necessarily restricted on account of the limited accommodation for practical work in the laboratories. The strength of the Engineering College which was 45 in 1917-18 has increased in the short space of four years to 156 in 1921-22. The Entrance Examination of the Mysore University was held for the first time in 1917 when the number of candidates was 244 of whom 120 were declared to have passed. The corresponding figures in 1921 were 1,029 and 287. If the increase proceeds at the present rate, it will soon become impossible to give admission to even half the number seeking it. It might be of use to inquire what remedies or palliatives can be found for the present state of things. One way would be to add to the number of Faculties by adding Medicine and Law as soon as may be convenient. The Medical Colleges of other parts of India are already unable to admit Mysorean students as all their available accommodation is required for local men. How far funds would be available for such expansion of the work of the University is a question for the administrative authorities of the State to solve. In considering the answer to this question it will have to be borne in mind that all departments of education, University, High, Middle and Primary, should proceed with equal step, no one department being favoured at the cost of the others. Another and perhaps more effective remedy would be to turn the present Collegiate High Schools into Intermediate Colleges by adding one more year to the course of study in the Collegiate Schools. The Intermediate Colleges would be formed of four classes, the present fifth and sixth forms and two Colleges.

Entrance Examination would mark the completion of the Intermediate College course, while the S. S. L. C. Examination would mark the completion of the course ending with the sixth form. When the Intermediate Colleges are formed it should be possible to start alternative classes from the fifth form upwards, three periods in the morning being devoted to such cultural subjects as are necessary for all pupils, and the whole afternoon being devoted in the case of some pupils to academical subjects and in the case of others to special or vocational subjects and workshop practice, which would fit the pupils for practical work and a career in life without having to proceed to the University. Such alternative subjects might be various, and should include agriculture, the chief industry of India, mechanical and civil engineering in their lower branches, training for a lower teacher's diploma than the B. T. Degree, domestic science for girls, commercial training, training for telegraphists and for police duty, etc. The number of vocational subjects may be increased from time to time as need is felt. As many of the vocational courses of the Intermediate Colleges may be co-ordinated with higher University teaching as possible, to encourage a few select lads to proceed to the University if they are deserving. Such co-ordination would be easy to make when there are Colleges of the University status teaching the same subjects. Thus the Intermediate Colleges would provide education for a large number of young men who have not the abilities or the means of proceeding to the University but prefer to go into active life from the Intermediate College or High School. Along with the formation and

thought-out scheme of Technical Instruction with graded institutions from Taluk and District schools to a Technological Institute, in which whole time instruction is given in technical subjects with workshop practice, may be instituted. To work out schemes of this kind will require time, experience and a heavy outlay. Yet it is worth while by offering alternative courses to boys of average abilities to check the present rush to the University and reserve University Education for young men of the highest capacities and for those who desire high education in cultural subjects and have independent means and leisure.

Similarly for women a graded scheme in subjects of domestic science from Middle schools upwards to the University can be arranged. Your learned Vice-Chancellor referred to this subject in his address last year. It would be wrong to consider that subjects of domestic science are not worthy of taking a place in University education. When it is considered that woman's chief function in life is that of maker of the home, and man's chief happiness is found in a well-ordered home, any teaching which fits a woman to be a model wife and mother would be welcomed by Indian women who are unsurpassed in devotion to their duties. The humbler duties of cookery and laundry work may be taught in middle schools for girls by practical lessons while subjects like hygiene, home-nursing and economics, etc., may be taught in Girls' High Schools. In the University a higher course worthy of it can be arranged for women in select portions of applied chemistry, sanitary science, applied hygiene, bacteriology, general biology, and physics with practical demonstrations and experiments, in economics of the household in general, and child psychol-

ogy and ethics. There is quite enough of cultural and scientific training for women in a course like this to make it equal to an advanced course for men. A department for the education of women built up gradually from below is what is wanted for giving an impetus and right direction to women's education in Mysore. When the Maharani's College was started forty years ago by a few enthusiasts there were hardly two or three good middle schools for girls in the Province. Its establishment was evidently much too premature.

Graduates of the Mysore University of 1922, I congratulate you on your success in University examinations and hope and trust that it will be a precursor of equally great success in life. You have received an education, which is second to none obtainable in India, by the enlightened liberality of His Highness the Maharaja. You have given proofs of your industry and more than average abilities by passing your examinations. The culture and the training of character you have received will make you useful and enlightened subjects of His Highness, and I hope you will make worthy use of your opportunities in a way that will reflect credit on your University. You have taken a solemn obligation to-day to uphold and advance social order and the well-being of your fellow-men. This is a comprehensive obligation. Your first duty is to be hearty and firm in your loyalty to your Maharaja and the State that have done so much for your enlightenment, culture and happiness. If the spirit of unrest that has spread to a considerable extent in other parts of India find entrance into the State, it will be your duty to fight against it and prevent it from contaminating the ingenuous minds of the people of this Province. And

further it is your duty to preach and implant in the minds of all Mysoreans loyalty to the suzerain power under whose protection and by whose generous guidance and help the State that has educated you has flourished. But you have sworn also to uphold and advance social order and well-being of your fellow-men. By your education you will be centres of light wherever fortune may place you. You have knowledge, your judgment has been cultivated, and you are able to decide what is right from what is wrong, what is proper from what is improper. You have also under the humanising influences of the University learnt to sympathise with your less fortunate brethren, to understand their weaknesses and deficiencies and appreciate their just hopes and aspirations. It will be your duty to guide them by your wisdom, and help them by your knowledge to fulfil their righteous aspirations. You will see around you a vast amount of ignorance, prejudice and blind adherence to long-established usage, which may have had a justification in ages long gone by, but which cannot suit the present enlightened times. It will be your duty with your wider knowledge and keener judgment to lead the blind and the ignorant into the right path and persuade them to adopt reforms that would increase their happiness. You should make the cause of popular education your own, and give your personal help in spreading Primary education among children and especially in helping the cause of adult education among the people around you. On Local and Municipal Boards your active work will be required. By your generous sympathies and help you can bring enlightenment into many dark nooks, and happiness into the lives of your unfortunate fellow-men. For these

unselfish services the State that has educated you has claims upon you, and you will increase your own happiness by performing them. Your joy and satisfaction in helping others will make you happier. In whatever you do always entertain high motives, suppress ungenerous and mean feelings, and be always ready to render service to others, while not neglecting your own interests or those of the people nearest you. I wish you all success and prosperity in your future life.

May this University flourish for ever!

THE SCHOOL ARITHMETIC
BEING SOLUTIONS OF THE
QUESTION PAPERS SET FOR THE
LOWER SECONDARY
EXAMINATION FOR THE
YEARS 1880 TO 1904

CHIEFLY INTENDED FOR THE USE OF PUPILS
 OF THE 1ST, 2ND & 3RD FORMS

BY

H. CHENNAKESAVA AIYANGAR.

Price—8 As.

HISTORY OF THE INDIAN PEOPLE.
LIFE IN ANCIENT INDIA

In the Age of the Mantras

By P. T. SRINIVAS IYENGAR, M.A., L.T.

D. Cr. 16mo. 140 pp. Price Re. 1. Charges extra.

By the same Author.

THE GAYATRI

D. Cr. 16mo. 48 pages.

Price 6 as. Charges extra.

SRINIVASA VARADACHARI & Co., MADRAS.

MADRAS UNIVERSITY
REFORM BILL.

By

"AN EMINENT EDUCATIONIST."

THIS measure which the Hon'ble the Minister in charge of Education seeks to introduce into the local Legislative Council with a view to reconstituting the University has been placed before the Senate of the University of Madras for consideration, and has been discussed in press and platform in a manner certainly not characterised by the spirit of academic criticism. The dust and heat of the controversy have gone down somewhat and it may be worthwhile considering what exactly is sought to be done and how far what is proposed to be done is in the interests of education in this Presidency or otherwise. By way of introduction it may be said, that the drafting of the Bill leaves much to be desired, and the document could be made easily better. Much that is sought to be done by this new Bill can also be done under the existing Act even to the extent of creating a Teaching University, for which something like a beginning has already been made, if only the necessary understanding be established between the Government and the University, and a generous recognition be accorded to the need for autonomy in the management of the latter. All that is wanted is the genuine academic spirit in the management of the affairs of the University, and generous sympathy and liberal financial support in the controlling body of the Government. Any improvement possible in the working of the Madras University, great improvements are undoubtedly possible, does not depend so much upon the actual organisation created by law as on the

truly academical spirit in which such organisation as does exist is worked in the genuine interests of true education. The spirit of censorious criticism and cavil on the one side, and a genuine, if somewhat too open-handed and possibly even extravagant, expenditure in the organization of the teaching section of the Calcutta University have undoubtedly been detrimental to the best interests of that University. The recommendations of the Sadler Committee which gave the occasion for the various proposals for change in regard not only to the Calcutta and other Universities, but also in connection with the Madras University, which it must be remembered was primarily intended for Calcutta, are pitched on a scale of expenditure which even Calcutta wisely shrinks from. It is feared that this high scale of expenditure is hardly suitable for a comparatively poor country like India, and that has been responsible for the dead-set that the Calcutta University itself is making against the adoption as such of the recommendations of the Calcutta Commission as a whole. It is not due to the want of sympathy or want of appreciation of the value of the changes recommended, but much rather the detrimental effect that it is likely to have of narrowing the scope of higher education that is primarily responsible for this. There is besides in the University of Calcutta already an organization for University teaching, and the adoption of the Sadler Committee's recommendations would *ipso facto* involve the transformation of the existing organization into an altogether new one. The attitude of Calcutta towards these recommendations, therefore, has no more validity for application in Madras than the recommendations of the Sadler Committee themselves which were primarily intended for

adoption by Calcutta in the circumstances of her present position. It does not seem clear that this position is appreciated by the members of the Madras University Senate, if one could judge of their attitude by the report of the proceedings as they appeared in the papers. This, however, does not debar either Calcutta or Madras considering the principle of the several recommendations of the Committee with a view to adapting such of them as may serve useful educational purposes in the scheme of either of the Universities. It is in that light that the question has to be approached and we shall consider the proposals embodied in the *New Act* in this light.

The matter of changing the Indian Universities Act in the light of the recommendations of the Sadler Committee was raised in the Imperial Legislative Assembly, and, as a result of the discussions of that body, it was left to the Local Governments to deal with the matter as seemed best to them in keeping with the ruling principle of provincial autonomy, without imposing a general Act from above. It is apparently in response to this decision of the Legislative Assembly of the Government of India that the question has been taken up in Madras and a new Act sought to be introduced for the purpose of putting the University upon a better footing. The Sadler Committee's recommendations are clear in regard to when University education should be considered to begin. It is a definite recommendation of the Committee that it should be after the Intermediate. It was a recommendation of the Senate of the Madras University that Intermediate Education should be under the control of the University. The proposed Act, however, seems to

accept this recommendation of the Sadler Committee and proceeds on that basis apparently. Acceptance of this recommendation involves the creation of the Intermediate and Secondary Board of Education as recommended by the Sadler Commission or something equivalent thereto. What is sought to be done beyond this is to leave the affiliating University of Madras as it is to a great extent, introducing into its constitution some few modifications, but taking out of the control of this affiliating University the city of Madras within a ten-mile radius of Fort St. George to create what is called a *teaching and residential University* so that the present function of the Madras University would be divided among three bodies: (1) a Board analogous to the Board of Intermediate and Secondary Education to which will be relegated the Intermediate course at present under the University, (2) the affiliating University of Madras with modifications in its constitution to retain under its control all the University teaching outside the town of Madras, and (3) the Teaching University of Madras itself.

Any University organisation in Madras has to serve the educational needs of a vast population of about 42 millions, as large a population as any of the second-rate countries of Europe, but geographically Madras covers a length of almost 20° of Latitude and about 10° of Longitude at its widest. Such a vast distance would, at first sight, make it obligatory that the Madras University should remain an affiliating University alone, till other Universities catering to a smaller area should spring up in various centres now served by one affiliating University. This does not necessarily involve that all of these Universities should be of an affiliating

character, or that there should not be a vast variety in their character when they come into existence in some number. The Senate Committees, and the Senate itself, committed themselves to the opinion that the University should be so shaped now as to lead to the creation ultimately of 4 or 5 Universities in the comparatively near future. It would seem a strange notion then that this same body, the University Senate, should have committed itself to the opinion, which its final resolution would seem to indicate, that no change should be made in the constitution of the University till such a change is devised as would treat all mofussil centres exactly as Madras or any other centre. That there should be no teaching University created in Madras, or by implication elsewhere, till the advantages of a teaching University could be provided in an equal degree for every educational centre in the Presidency is a proposition which would find but little support. For one thing, that kind of an equality that this proposal claims for the mofussil centres is certainly not enjoyed by any of the mofussil centres even under the present Act. Madras enjoys advantages which are denied to the mofussil, and apart from the intentions of the authorities concerned it cannot be otherwise under any circumstances. The proposition is so futile that it does not require to be considered seriously, whatever the intentions of the Senate that adopted the resolution might be. It is so absurd on the face of it.

If it should be definitely the opinion of the Senate that the Madras University as it is at present serves all the needs of the community and requires no change, or either from the point of view of expenditure, or because of other similar consideration, it is definitely the opinion of the same body that no better

organization of University education is possible, the plainest way of saying so would be to resolve that no change is called for. That would have been quite straight. But the Senate has stultified itself by adopting such a proposition when on its own initiative it has made several recommendations calling for changes, involving a variety of detail and some even of principle. Without misrepresenting the views of the Senate in the least, it could be assumed that changes both in the constitution and in the working of the Madras University as it is at present are desirable, and improvements possible. One of the recommendations of the Senate, as was already indicated, was to the effect that the re-organization of the University should be of such a character as to lead to the splitting up of the single University of Madras into a number of Universities at salient centres. It can hardly be argued that each one of the new Universities that may come into existence as a result of this recommendation should be of the same pattern as the present Madras University. The Senate, therefore, has clearly committed itself to changes even of varying character in respect of the constitution of the Madras University. What the draft Act seems to contemplate in general is to leave that part of the University organization relating to the mofussil in the same position as it is at present, with the possibility, contemplated by the Senate, of the more important centres developing into separate Universities in course of time and according to financial aids that may be forthcoming. As a first measure of the change contemplated, the Act contemplates the creation of a teaching University at Madras. The proposal is neither new nor revolutionary in character. When the Government of India made the annual grant of Rs. 65,000, the

grant was made with the set object of taking steps to transform the purely affiliating University of Madras into a teaching University, and the few chairs that were created had this object in view. So far as appears, that object seems still to be kept in view, if the University ever had anything like a consistent policy in matters like this. The teaching University contemplated under the Act would only carry the project, it may be, many steps forward, according to the financial assistance that the Government is prepared to render. When it is the question of creating a teaching University, whether it be necessarily residential or no, it must be limited in area, and a ten-mile radius round the Fort St. George is as good a limit as any that can be adopted. The real question at issue is what the character of this new organization is to be and how it is to be dovetailed into the existing institutions, both those of Madras itself and those in the mofussil. Not being a brand-new creation where there was no organization existing, a teaching University, or anything like it that may be brought into existence in Madras, will have to be not necessarily of the same character as any existing University elsewhere. The colleges in Madras, both general and professional, will have to be worked into this new scheme, and a new organization to supplement these, of an entirely different character from the present affiliating University, shall have to be created. On the face of it, it cannot be a single institution like a unitary teaching University. It has, perforce, to be of a constituent character, the colleges such as they are, retaining their individuality to a great extent, and still playing a recognised part in the working of the University. It cannot be altogether dif-

ferent from this, and an arrangement such as this is already under discussion to bring the colleges of Madras into closer touch with the University, particularly the Arts Colleges. It will thus be seen there is nothing phenomenally new in this proposal and the whole problem really consists in how exactly the academic details—which are the only things that really matter—have to be worked. The Act cannot provide for this although it may be wise that its details are considered and allowed to crystallise and assume their shape before a general Act is framed to bring about the transformation. Having regard to the fact that Madras has been an affiliating University, and the geographical needs of the Madras Presidency seem to make only a loose connection possible between the mofussil colleges and the Madras University, how far could these mofussil colleges be allowed to partake of the benefits of the teaching University such as is expected to be brought into existence? In other words, what is to be the real character of the teaching University that is intended to be created in Madras? What are its relations to the colleges in the University centre, and are the mofussil colleges to be brought into any connection with the teaching University at all? These are points that have to be cleared before anything like a really just criticism of the measure could be adopted.

A teaching University is certainly a more expensive institution than an affiliating University. No University that does the real work of advancement of learning, while at the same time catering to the needs of the community for higher education, can be anything but expensive, expensive in the sense that it involves a considerable amount of outlay and does not bring in a measurable

return that could be counted in rupees, annas and pies. But a well-equipped University, expensive though it be, is a national asset, and the only return that it could be expected to provide is the intellectual development of the nation as a whole, taking the word "nation" in the widest, perhaps even the loosest, sense of the term. What actually would be the expenses involved cannot be estimated unless the academic details of the teaching University are considered. It may be taken for granted that the expenses of creating an institution like this is likely to be great. A Government that takes it upon itself to introduce a measure of legislation with a view to creating such an educational organization ought certainly to find the funds for it, though it is ordinary wisdom to count the cost before launching into a scheme. It is just possible that the Government have an estimate already which may prove inadequate, but which must be much beyond what appears in the *Draft Bill*. No really useful estimate of expenditure is possible till the general character of the teaching University, its relation to the constituent colleges and its connection with the affiliating part of the University are put upon a clear footing.

The first point to be considered therefore in connection with the University Act is, whether there really is any need for a change. There never can be a stationary condition in matters pertaining to such a vital concern as the education of a people, and the organization providing this vital need of national life must be undergoing change to meet the rising needs of the community. As a matter of fact, the very Madras University itself has been introducing changes now and again, but such changes partake generally of the character of tinkering repairs rather

than of well-thought-out changes with a definite view to the attainment of a well-conceived object of education. This character of the changes must go. An ideal must be set up, which would satisfactorily meet the needs of the rapidly changing conditions of the community having regard to the new political dispensation which is coming, it may be slowly for some, into operation. The community should prepare itself for the new political, and what is more, the new economic, life as the result of the larger political responsibilities opening before it. We have come to the stage of almost a simultaneous Civil Service Examination, and several other examinations for nominations for other departments even in India itself. The Universities are called upon therefore to reform themselves to meet this larger need, apart from the consideration that in a large country like India with its vast population, it is in many ways undesirable that Indian students should be under the necessity, in any large number, to go to foreign countries to educate themselves, not that going to foreign countries is an evil in itself or undesirable. What is really undesirable is that in an empire of this size, with its resources, and having so many Universities, one should deem it necessary for really good education to go elsewhere is nothing short of a disgrace to the organization of the empire as a whole. Indian students, men and women, ought to be under no need to go elsewhere for completing their education as Lord Hardinge observed long long ago, however much it may be desirable that those of them that could ought to have the wider outlook and the larger views that travelling to Europe or elsewhere would give them. Therefore then, it is clear that it is not this

University or that but all Indian Universities are under an obligation to widen their scope and to increase their means, and thus reorganise themselves to provide, each University in itself, as sound and as high a degree of education as they could manage to give. With this larger view it will hardly be considered premature to effect certain changes or introduce a more general measure of reorganization in the Madras University as a whole. The very Senate that put itself in a definite position of opposition to the Act has itself recommended various changes which may not all of them be well articulated one with another, but still all of them with a tendency to effect improvements such as are foreshadowed above. If so, are we not called upon, provided we have the means as a University, or what amounts to the same thing, provided the Government is prepared to find us funds, to take up this question of the reorganization of the University to meet new requirements? Then the question resolves itself into, how far the reorganization adumbrated in the new Act would meet the new needs of the community? The Act, without going into details, attempts (1) to detach the Intermediate education from the University and entrust it to a body with a different organization from the University, (2) to let the affiliating University of Madras go on with such improvements as may be effected in it as suggested by the Senate itself and others that may be suggested hereafter, and (3) to take Madras itself out of the affiliating University and create in it a teaching University, residential or otherwise. We shall consider these separately.

It will be found on closer examination that the changes vaguely indicated in the Act do follow in principle the lines recommended

for adoption for the London University in the Report of the Haldane Commission, appointed to enquire into its affairs and suggest improvements in its working. It has to be borne in mind that the Madras University and its sister Universities of India were formed on the model of the London University, and exhibited at the time that the Commission of 1904 made their recommendations, the same defects that London exhibited at the time of the Haldane Commission. The remedy suggested by the Commission for the London University ought certainly to be of application, with the necessary changes, to the conditions obtaining in the Madras University. Some of the recommendations of the Raleigh Commission have had the same tendency and had but been carried out imperfectly. However satisfactorily the Madras University might have done its work as an examining University and whatever great improvements were possible under the existing Universities Act, the University as it exists at present is no more than the University of London that evoked the following criticism from the Haldane Commission: 'Whatever importance may be attached to examinations, an examining board could never constitute a University; and, again, 'technical instruction and advanced courses of study may be multiplied indefinitely without providing University education. Of course any educational institution may be called a University; but, as Dr. Rashdall says, "the name has got to be associated with education of the highest type: to degrade the name of a University is therefore to degrade our highest educational ideal." We do not mean however, that whatever the call, non-essential things ought not to be provided, but only that they can be done without a University, although some of them can be better done by a University and in as close a connection as possible with the work which only a

University can do.' Speaking of the development of modern English Universities, the Commission admit, "many young men and women whose parents could not have afforded the cost of educating them at Oxford or Cambridge have attended the classes and laboratories of the modern Universities and have found in them either the general training or the special professional equipment which they needed for their work in after-life." But they are distinctly of opinion that "speaking generally, it may be said that in nearly every case, the development of the modern English Universities is the gradual evolution of a complete group of faculties in institutions originally founded for the pursuit of science and technology. *Perhaps, it is yet to be proved whether the definite professional outlook of some of the modern English Universities is consistent with the wide intellectual training which University education has always been understood to imply.* We have no doubt, however, that any branch of knowledge which is sufficiently developed and systematised to be capable of scientific treatment may be taught and studied in such a way as to form part of a University education. *The differentiae of University education do not consist in the nature of the particular subjects studied, or in their difficulty or abstruseness, but rather in the nature and aim of the students' work, and in the conditions under which it is done.*"

Before proceeding to consider the Bill itself in detail it will be just as well to gain an idea of what exactly a University is expected to be and what purpose it is intended to subserve. The Royal Commission on University Education in London consider the first essential of a University education to be "that the regular students of the University should be able to work in intimate and constant association with their fellow-students, not only of the same but of different faculties and also in

close contact with their teachers. The University should be organised on this basis and should regard it as the ordinary and normal state of things." This apparently implies what is generally described as a teaching and residential University, but the same ends can be attained, if not to the same extent, at least to nearly as great an extent in a University organized perhaps somewhat differently. What is really essential is that all the students of the University and their teachers should be so brought together that they do most of their work not merely within sight of each other but in a way that the work of the one is more or less known to the others, so that, it follows, it is also understood by others, though they may not be engaged on the actual item of work, or even to those belonging to other faculties. What is wanted really is, "students and teachers should be brought together in living intercourse in the daily work of the University." The students contemplated here are not merely the advanced students who may be doing post-graduate or research work, but under-graduate students, as the Commission insist that the students that are brought into this living contact with their professors must be of an age "when fresh intellectual impressions and habits of mind are easily formed," if, as they take it, the main purpose of their student-life is the training which they hope to receive from the University. It will be clear from this that in the affiliating University of Madras, the approximation that could be made to such a state of things is very far indeed from coming up to this level of demand. As it is, it is the examination that dominates the educational system of Madras and the training that the Commissioners make so much of comes in nowhere; so that, it might, without impropriety be said, that the University education as it is carried on at present may be said to pay but little attention to the training

of the student. This training when really given makes great demands both upon the student's energy, and upon his time, and hence is most effectively given before the struggles and pre-occupations of life begin for the student. The demands upon the student's energy for his training would be great because he lays himself out to learn methods of independent work carried on in an inquiring spirit and expected to result in habits of mind which take time to form and require undisturbed attention. This is hardly possible if the mind is distracted by other cares and interests. While therefore it may be admitted that students undergoing University education in Madras may not come up to the requirements of this ideal completely, they ought to have the facilities to come up to as near this ideal as they possibly can.

The second essential according to them is that the work actually done at a University by teachers and students should differ both in its nature and in its aim from the work of a secondary school and from that of a technical or a purely professional school. In a secondary school a student is engaged in the acquisition of many things which could be acquired while the mind is specially receptive. It is at this stage that the teaching has to be conducted by the setting up of tasks and getting through them. What is more than the acquisition of knowledge is the moral and mental training essential to success in later life which "the pupils gain by the orderly exercise of all their activities demanded in a well-arranged school." In a technical school the tendency of education is to supply the means for acquiring the various details of an art necessary for the profession, and the whole teaching, therefore, is limited to this purpose and directed largely to the application of ascertained facts to practical purposes. The acquisition of knowledge in either case lays itself out to a ready ascertainment by the test

of qualifying examinations. In a University, the aim is different and its organisation ought to be adapted to the requirements of the end in view. In a University, knowledge must be pursued as elsewhere, but pursued as an end in itself, but not as a means to an end. Knowledge is pursued for its own extension and always with a view to the attainment of truth. The real difference between the acquisition of knowledge on the one side and on the other, is a difference in the whole attitude of mind. In a University scientific thought is intended to become a habit of the mind and intellectual power is developed incidentally in the acquisition of this habit. Current notions of University education and what that education is intended to fit a man for, are very varied indeed. Statements have been made from public platforms and have appeared time and again in public prints that Universities should cease to be "halls of learning" and should become forthwith technical educational centres, teaching all conceivable arts, and training and fitting students of all sorts that should be allowed to come into it for all kinds of vocations in life. Even where the outlook is not so plainly expressed there is an underlying notion in the great bulk of the criticism of University education that its primary function is to fit a man or woman for life in the sense that it enables one directly to enter a trade or profession and earn a living. It is this that colours a considerable body of criticism of University education here. The following extract from the same authority will perhaps serve as a useful corrective to this false notion: "Modern Universities are called into existence principally because of the social need for professional training, and probably most of the students enter the University with a purely utilitarian object; but they should find themselves in a community of workers, devoted to the pursuit of knowledge for its

own sake, and tenacious of this ideal against all external pressure of material and social advantages. Academic instruction is primarily purely theoretical and scientific and yet it is not only the best training for the conduct of life, but also the best if not the necessary introduction to all those professions and callings of which it may be said that practice and progress are closely connected and constantly reacting on each other. Its effect in relation to the profession or calling which the student has in view is that he brings to it, not only the discipline, training, knowledge and resourcefulness he has acquired but also the intellectual mastery of the principles involved, which enables him throughout his life to appreciate and apply all advances in science that bear upon it." This opinion of the Commissioners is found to be in substantial agreement with the ideas expressed in a special report by His Majesty's Inspectors on Workers' Educational Association Classes. We make no apology therefore for quoting this somewhat long extract from this special report: "We may assume that University teaching is teaching suited to adults; that it is scientific, detached, and impartial in character; that it aims not so much at filling the mind of the student with facts or theories as at calling for his own individuality, and stimulating him to mental effort; that it accustoms him to the critical study of the leading authorities, with, perhaps, occasional references to first-hand sources of information, and that it implants in his mind a standard of thoroughness, and gives him a sense of the difficulty as well as of the value of truth. The student so trained learns to distinguish between what may fairly be called matter of fact, and what is certainly mere matter of opinion, between white light and the coloured. He becomes accustomed to distinguish issues and to look at separate questions each on its own merits and without an eye to their bearing

on some cherished theory. He learns to state fairly and even sympathetically the position of those to whose practical conclusions he is most stoutly opposed. He becomes able to examine a suggested idea, and see what comes of it, before accepting it or rejecting it. Finally, without necessarily becoming an original student, he gains an insight into the conditions under which original research is carried on. He is able to weigh evidence, to follow and criticise argument, and put his own value on authorities." This puts in a nut-shell what exactly University education is intended to subserve according to the highest educational authorities, and it is hardly opposed to the notion of fitting a man or woman for life as nothing fits a man or woman better than this mental training with the moral consequences arising from the mental attitude thus acquired at a University.

The third essential, according to the Commissioners, is that the higher work of the University should be closely associated with under-graduate work. They consider the two alternative forms which proposals for their separation take. The first is to concentrate advanced and post-graduate work in one centre or in limited centres, and distribute under-graduate students over institutions at great distances. This is almost what exactly is intended to be done by the Draft Act under consideration. The other alternative is to create a number of research centres and scatter them over the whole area so as to subserve the needs of students all over the country. The first of these alternatives is what exactly had been adopted by the Calcutta University which concentrates all its post-graduate work at the University and leaves the colleges to carry all their teaching up to the degree examinations. Any other course is hardly possible for the Calcutta University with the number of colleges involved and their distribution. Madras is in a some-

what worse plight. The larger number of colleges in Bengal are in Calcutta or in the near vicinity. It is comparatively a small number that lie scattered at distances from Calcutta. In Madras the far greater number of colleges are in the mofussil scattered about the whole length and breadth of the Presidency and it is comparatively a small number that lie within the limits of Madras. The greatest objection to the adoption of a central University of a teaching and residential type is the cost involved in the institution of such a University on the public funds, and secondly the expensiveness of the education to the students, the great bulk of whom are comparatively poor and could hardly afford the expensive education in a teaching and residential University. This is a factor that His Majesty's Commissioners are not oblivious of even in regard to the London University itself. Hence this alternative commended itself to Calcutta and may have ultimately to be adopted at Madras as the only possible course for the time being, it may be as a measure of transition. The other alternative proposed, which the Commissioners also reject, is hardly suitable for our country as the creation of research centres in various localities is a matter that could hardly be thought of as yet having regard to the educational facilities available at present in the possible centres, and when these facilities grow to be far greater than they are, much the best way of providing for the growing needs would be to create more University centres rather than provide centres of research. Mere research institutes or centres of research do not make a University and there is hardly the demand or the likelihood of a demand for such technically educated people in the country apart from University men. The Commissioners object to both of the alternatives as involving "a half conscious admission that the great majority of the

Students who at present take the Bachelor's degree of the London University do not receive a University education at all," and proceed to suggest a remedy for this "the greatest evil which results from the present organization of the University and the one which it is most important to remove in the interests of higher education in London." They proceed to state that no one suggests divorce of research from teaching, and agree with the Professorial Board of University College that any hard and fast line of division between under-graduate and post-graduate work is impossible. They advocate the organization, in close proximity to the under-graduate students, of even the most technical research departments that may be desirable. They lay down "the teaching will, of course, predominate in the earlier work, and research will predominate in the advanced work; but it is in the best interests of the University that the most distinguished of its professors should take part in the teaching of the under-graduates from the beginning of their University career." They do this for two reasons: "it gives the best teacher the chance of training the students along his own line of work; it provides scope for his personal influence and of the influence of his original research work as an inspiration to the student himself." His personality is the selective power by which those who are fittest for his special work are voluntarily enlisted in his service and his individual influence is reproduced and extended by the spirit which actuates his staff. Neither is it the few alone who gain; "all honest students gain from association with teachers who show them something of the working of the thought of independent and original minds." They consider it therefore desirable in the highest degree that the highest University teachers should take their part in under-graduate work and that their spirit should

dominate it all; and as a natural consequence they hold that this higher work should not be separated from the rest of the work of the University. In other words, they want the University to be a teaching University both in the under-graduate and in the post-graduate courses. Such a joint organization is a distinct advantage to the under-graduate students and insures influence upon all departments of it. While the Commissioners commend the starting of Research Universities as in Germany, they would condemn the measure if these institutes are started under the University and by expenditure of University funds. These institutes, according to them, end in the exploitation of research in the interests of particular trades or professions. One of the most influential of these institutes in Germany explicitly provides for the prevention of such exploitation and sets up as its object the supplementing of existing agencies for investigation and for undertaking work for which no provision has so far been made. As a matter of fact, they go the length of laying it down that the existing provision in the London University statutes for recognition of these institutes has not been productive of any beneficial results. "We believe," they say, "that what the University requires from institutions such as those named has the same kind of convenience of access and general co-operation in the interests of learning that it looks for from the National Museums or the collections of learned societies." They are strongly of opinion that the University should make provision for the publication of the investigations which are carried on under its auspices by teachers or by students, and consider "the establishment of a University Press under the full control of the University itself is, therefore, in our opinion, an essential function of the University."

Having thus indicated what exactly the generally-accepted ideal of a University is, we have now to consider whether the new Act makes any closer approach to this ideal than the existing University of Madras. Ostensibly, at any rate, it would be admitted that the creation of a Teaching University in Madras would be an undoubted move in the right direction. The starting of a constituent teaching University at Madras does not mean that it sets the seal once for all upon other centres developing along similar lines, much rather it would be the beginning of a move in the right direction, and if Madras in its present circumstances can develop only into a constituent University such as is projected in the Act, there is nothing to prevent other centres in the Presidency developing in fulness of time into other patterns of University more or less close to a teaching University. There are very few centres that can now be thought of where a constituent University of the kind intended for Madras could well be started either now or in the near future. Some of the centres may lend themselves far more readily to strictly unitary teaching Universities. Still other centres may adopt a pattern between the one and the other in various grades between a strictly unitary teaching University and the frankly federal type. So then, on the face of it, the Act proposes to do nothing revolutionary; much rather, it is a conservative Act which proposes to proceed a few steps farther in the lines already laid down by the Government of India Act and the policy of the Government of India so happily inaugurated on the occasion of the Delhi Coronation of His Majesty the King-Emperor.

As was remarked before what is sought to be done might, to a great extent, be done even under the present Act. There could be no harm however in a new Act of the Provincial Government putting the University on a

more real legal position. The real question, however, is, how far the new Act gives promise of realization of this University ideal. It is very unfortunate that the new Act should show here and there communal notions which have already done so much harm to the public good in the actual administration under the short tenure of the new dispensation. Of all places, a University ought to be free from this canker of communal notions and interests. The first question therefore is whether the University will be allowed to have complete autonomy which alone can foster University life. This autonomy involves naturally full internal freedom in the pursuit of knowledge and complete exclusion of communal considerations within the walls of the University, be they European-Indian, or Intra-Indian. The sole guiding consideration ought to be worth and work, though it could not be said to have been always the sole considerations hitherto, before the Reforms or after. The first demand therefore ought to be an assurance that the University will enjoy this freedom. It is easy to purge the Act of anything communal by removing just a few provisions to that effect in one or two places as they seem superfluous and may prove to be productive of great harm. Whatever the intentions of the Government may be, they ought to be indicated clearly in a distinct financial provision for the maintenance of the University. As has been already pointed out the financial provisions made in the Bill are not clear and seem as far as they go, extremely niggardly. It is likely as was already remarked the Government intend more liberal provision than is exhibited in the Act. Even so, from all that one can see in the Act itself, the Government's estimates whatever they be are bound to be very much under the mark. We recognise the times are times of financial difficulty, but what may be spent upon a University is a financial investment of

a permanent and progressive character, and what is provided for expenditure under this head ought rather to be regarded as an investment for the permanent development of the resources of the country rather than as a mere item of expenditure. Ten lakhs a year would seem a good beginning for the requirements of this teaching University and the present needs of its affiliating section with provision for liberal but occasional non-recurring grants which are the kind of grants that the British Government in London seems to prefer in regard to these Universities.

The next item that calls for criticism is that in the Statutes attached to the Act there peers out a provision that institutions belonging to the University should be started entirely by the University alone. This is not merely narrow and retrogressive, but it is pernicious to the extent of preventing the progress of the University. The policy ought to be, as far as may be, to draw out private resources in regard to matters educational, particularly in the department of higher education. Provisions having this tendency ought to be removed. So long as mofussil centres continue to be affiliated to this University, there should be explicit and well-understood provisions by means of which really good external students of the University should have access to the full privileges of the teaching University. This will smooth considerably the difference between what may seem the favoured teaching University of Madras and the outcaste affiliated institutions in the mofussil. This need hardly be the case, and if there is warrant for that impression in any of the provisions of the Act, these sections have to be carefully weeded out.

One other vital drawback as it seems to us is the division of the University into two, except in name, providing each one with separate administrative bodies almost through the whole length of it. Except merely adding

to the expense of it, the advantages subserved by this double organization are not quite apparent and it is this doubling of the organization that perhaps is the cause of the suspicion that the affiliated colleges are being relegated to a position of comparative unimportance and therefore of little influence in University life. The University can be given a single organization by which it does its own work as a teaching University and works the affiliated colleges not as distinct bodies from the University but as external institutions working towards the same University ideal. This may be difficult to bring about but with a sufficient amount of give and take on both sides it will not be impossible to bring into existence an organization that will satisfy the needs of both. Till within recent times, the whole of the University administration was practically in the hands of Madras educationists only, while we are thoroughly convinced that that arrangement need not be perpetuated, nor is it altogether really good, we are equally convinced that it had not proved so harmful to the interests of the mofussil colleges. It is really possible to bring the mofussil into closer touch with the University at the centre itself and there need be no difficulty in giving the whole University an organization which will meet the needs of both the sections of the University adequately.

In regard to the affiliated colleges themselves, their association more or less intimate with a teaching University of some character would be only an additional stimulus to their development into centres of teaching in course of time, and whenever any centre should be ready for it, it ought to be given a separate organization of its own. The real difficulty in the way of the development of these centres would be the personnel and finance. If sufficient interest be beaten up in the eligible localities more financial aid may be forthcoming than we see at present. The difficulty

of the personnel has to be met, however long it may be postponed; the sooner it is faced and provided for the better. Since a beginning has to be made sometime in the reorganization of higher education, the sooner it is done the quicker it would be possible for Madras to come into line with the more reputable University centres elsewhere in the world. We are glad to find ourselves supported in the position we have taken up at the commencement in regard to full and complete provision in India itself for the higher education of her youth by the Students' Committee, of the report of which a telegraphic summary appeared in the papers recently. It is not a day too soon to begin the reorganization. What is really wanted is the right spirit in the Government that provides for it, and in the administration and academic bodies of the University which have to carry on the work. The real difficulty is not the devising of the Act, but the provision of the real academic spirit in the working of the highest academic institution of the country, so far as Madras goes. It behoves every son of Madras, Brahmin or non-Brahmin, without respect to caste, colour or creed, to provide amply for the needs of the higher education of the youth of Madras and to see that the provision is ample and liberal, and is put to the proper use and in the proper spirit for the advancement of learning.

KARUNATARANGINI

(English translations from the author's original lyrics in Sanskrit)

By K. KRISHNAMACHARYA, B.A., I.T.

WITH A FOREWORD

By PROF. P. SESHADRI, M.A.

Price 4 as.

* The poems are full of melody and fine sentiment.—*O. H. O. Magazine*.

* The translations are readable.—*The Daily Express*.

SRINIVASA VARADACHARI & CO., Triplicane, Madras.

CO-EDUCATION—CRITICAL.

IN the first article* on Co-education, an attempt was made to give a brief account

of the progress of co-education in some of the

most important western countries. It was really the example and experience of America which led first a few thoughtful observers in European countries to believe that the mixed system might with advantage be adopted. It is indeed surprising to find that at least five-sixths of the citizens of the United States are taught in co-educational schools. The verdict of the Great Republic upon co-education runs as follows:—"Co-education of the sexes is preferred, because it is natural, following the ordinary structure of family and of society—customary being in harmony with the habits and sentiments of everyday life, and of the laws of the States; impartial, affording one sex the same opportunity for culture that the other enjoys; economical, using the school funds to the best advantage; and beneficial to the minds, morals, habits and development of the pupils." In spite of this American praise, there still exists a considerable difference of opinion as regards the extent of benefit to be derived from co-education. Accordingly the present article will examine the nature of the ideal on which co-education is based, with a view to determine if its high claims can be justified.

The best way, to understand the ideal implied by co-education, would be to find out how it came to be advocated.

In the opinion of some critics, the value of co-education chiefly depends upon the fact that it is cheap, and that co-educational

* Appeared in the January (1922) number of *Indian Education*, Bombay.

classes are easier to manage than separate classes. Now it is true that historically speaking, the beginning of co-education lay in economy. It is also true that there are a number of co-educational institutions, even to-day, which are largely influenced by the consideration of economy alone. But all this does not appear to justify the description of co-education as a cheap method of instruction. The chief claim of co-education is that it removes the moral evil to which the separate school system is exposed. It is contended that the separate-school system, though admirable in many ways, suffers from one fatal defect. The exclusion of women, whether as companions or as teachers from the school organisation, is a very serious blemish. In England, for instance, a child, at the age of nine or ten, is launched upon the world of large preparatory, or the lower forms of public, schools. Here in place of the vigilant affection of his own people, the boy receives the fiftieth part of the time and attention of his busy tutor and the occasional hospitality of a house-master's wife. It is argued that in the absence of feminine influence, a few savage virtues may be cultivated. On the other hand purity, modesty, gentleness fly away. To Shelley, we are told, the Eton of his days was a 'world of woes.' In a similar manner, advocates of co-education emphasize the harmful tendencies of feminism so far as they affect female-education. For instance, extremists among the promoters of feminism obscure sex-distinctions and lure women to the false ideal of competition on equal and identical terms with man. The inevitable result of this acceptance of the masculine ideal is to de-womanise women. It is against this tendency that writers like Taylor in England

and Stanley Hall in America have striven to open the eyes of their countrymen in this respect.

The real difficulty in connection with the aim of female education is the fact that some women marry and some do not. In England, for example, celibacy is compulsory for many women, because of their preponderating numbers when compared with the other sex. This gives rise to a certain amount of uncertainty about the education of girls. Will they be educated chiefly for marriage and worthy womanhood or for celibacy and economic independence? The feminists lay stress on the fact that many women must earn their living. They also contend that all women, whether married or single, have an individuality to develop, which is independent of their sexual life. In their zeal for independence, the mental similarities of girls with boys are exaggerated. To the extreme wing of feminism equality with men means doing the same work in the same way. It is against this tendency that Taylor powerfully argues in his 'Nature of Woman'. In that book, he has set forth with a wealth of scientific argument, the biological significance of sex. The Taylor-school starts from the premiss that most women are destined to marry. It, therefore, would impart a domestic bias to the education of every girl. It concentrates on the training for wifehood and motherhood. Thus the school stands for separate educational institutions for girls.

To the advocates of co-education, however, both these views embody half-truths. Of course it is important that girls, who must earn their living, should know how to do so. It is equally important that future wives and mothers should be scientifically acquainted with the duties of their position. It is,

however, essential in either case that men and women should come to know and to appreciate each other, whether they be partners in marriage or in the work of the world. The modern civilised-world requires that women should be not only wives and mothers, but friends, colleagues and helpers of men in every walk of life. As the separate-school system is grounded on an emphasis on the mental, moral and physical differences between the sexes, it is not calculated to promote the spirit of harmony and co-operation between the two sexes. Now if it is true that one of the important aims of education is to prepare girls and boys for the strenuous life of noble citizenship, and if it is also true that the maintenance and development of civilisation requires that there should be harmonious co-operation between the sexes, then the co-educationists declare that their method is the best way to reach this goal, so far as an educational institution can help us to reach it. Thus the case of co-education principally depends upon the moral and social aspects of education. The promoters of this movement claim that the presence of girls in a school produces an atmosphere definitely unfavourable to immorality extending to the use of coarse language or tolerance of gross stories. It is also claimed that this experiment does not involve the sacrifice of any of those advantages which belong to the best schools founded on the separate-school system. Then again it is pointed out that co-education can claim history as a warrant for its venture. It is, therefore, not a break with the past, but a fulfilment of old traditions. Thus co-educational institutions are schools of morality which are based on the conviction that the differences of sex are not antagonistic but complementary. "They try to bring

home within the doors of schools." Here youths of both sexes are reared, disciplined and instructed as brothers and sisters together side by side, with a view to enable them to enjoy in after-life, happiness flowing from the pure springs of duty and affection. Half the difficulties and half the failure of family life will be avoided by the influence of an education which enables either parent to enter into and sympathise with the trials of the other. Such parents can only be found among persons who have been wisely educated in co-educational institutions. The man, whose youth has been purified and sweetened by feminine influence, does not and cannot develop into a 'hog.' He has learnt how to respect and consider his wife as well as admire her. And she for her part is no mere helpless, clinging parasite, but rather, without losing an atom of her womanliness, a helpful and capable companion, who understands her husband's work and makes it light and easy by her sympathy. Still more, she is able to understand and fulfil the duty she owes to her sons.

Now let us turn from the glowing description of the advantages of co-education to sober reflection and examine the case of co-education with an open mind, *i.e.*, free from our prejudices and opinions as Indians. As the co-educationists point out, the most obvious fact about a boarding school for boys, whether in England or in any of the continental countries, is that a very large number of boys are herded together to lead a corporate life. Such a school removes a boy for two-thirds of the year from home and places him in an artificial community. Here he tends to become a 'unit' rather than an individual, being without the softening influence of his

A critical estimate.

mother or sister. He lives exclusively with other boys whose life is controlled and guarded exactly like his own. It is a kind of barrack-life, away not only from home, but also from the free and easy intercourse with girls of his own age. He finds that a deal of immoral behaviour, both of speech and action, lies beneath the surface of school-life. He finds that among his comrades there are lax ideas on the subject of sex, which seem to support the attitude which considers a girl as a natural play-thing. To put it generally, it may be said, without any fear of contradiction; that in the written as well as spoken opinion of thoughtful public school men in general, boys in Public schools are really exposed to a definite moral harm. But we may ask—are not boys in day schools, who are not altogether separated from the influence of home, exposed to this danger? It is possible to reply that many of the youths, who fall a prey to this temptation, have had a very deficient moral training at home. This may be true to a certain extent. It appears to us, however, that the causes of this temptation to youth must be sought in the opinions and time-worn prejudices, which society as a whole entertains, as regards the relation between man and woman. As a rule children are left to discover irregularly and by stealth the cardinal facts of life. They are taught to regard the most sacred element of their natures, that which concerns itself with the other sex, as something base and harmful. And there is no wonder that young men and women, at the conclusion of their schooling, go forth into the world too often with undisciplined passions and untrained instincts. It is feared that young people and especially girls are prone to sentimental extravagance in the critical years which lie between childhood

and maturity. In consequence of this fear, girls are subjected to checks in all communities all the world over. It is maintained that they must be removed from all intercourse with the dangerous animal man and kept in complete ignorance of his nature and character. If men and women are to live together in society, they must be carefully separated in childhood and taught to regard each other with distrust and suspicion. Then again we must remember that to boys boyhood is more a period of physical growth than of mental development. This circumstance tends to make boys appreciate what one may call muscular virtues—bodily skill and courage. In virtue of physical strength boys tend to become self-assertive and dominating in relation to girls as well as weak comrades. Now if this inclination to domination is not softened and refined at the right time, it is natural that such boys, when they will develop into men, will lack delicacy of moral sense.

Thus it is clear that the moral evil to which youth is exposed cannot be remedied merely by educating boys and girls together in a co-educational institution. Man must learn to be fair and just in his relation to woman. He must cease setting a very high value on the fact that he is physically strong. If he has physical strength, the woman has emotions and finer qualities of heart. In the west she has risen in revolt, and her sisters in the east are following her example. (Notice the fight for woman's franchise in our Legislative Assemblies.) Woman too, on her part, should recognise that after all man, though a dangerous animal in consequence of his physical strength, is not altogether incapable of refinement, as is amply shown by human history. Side by side with this revolution in

the ideas in regard to the relation between the sexes which are grounded on an over-emphasis on the 'beast' in human nature, it is necessary that both young boys and girls should know the elementary truths of sexual physiology and sexual hygiene. It is also necessary to instil into them a reverence for reproduction and all connected with it as the most vital and sacred thing in life. It must, however, be conceded that a co-educational institution, under certain conditions (to be mentioned later on), will to a certain extent remove the moral evil. The presence of refined women-teachers is bound to exercise a softening and refining influence both on boys and girls. But in order that this should be so, it is necessary that the co-educational training should be as far as possible continuous. Boys and girls should pass direct from the home to the co-educational school, with no intervening period of separation. Then again there should be no lack of teachers—both men and women—who are known not for their brilliant academic careers, but for their patient insight into child-nature, proved love and sympathy for children and boundless care for their physical, mental and moral welfare. It is only under these conditions that co-education would get a fair trial. When it is adopted solely by whole-hearted believers in its moral efficacy, it would not take long to compel a general recognition of the beneficent power of co-education. But as Cecil Grant points out it is the wide extension of co-education that is giving its true advocates the greatest anxiety. It is unhappy that the adoption of co-education in many places is due to the assumption that it is cheap to educate boys and girls together. Thus on the showing of the advocates of co-education themselves, the teaching pro-

fession, in England at any rate, does not appear to have been attracted by the moral efficiency of co-education.

Then again we may ask, does not co-education, by laying stress on the moral aspect of education, tend to ignore the other equally important aspects of education? If we study the educational practices in the various civilised countries, we at once discover that a sound system of education has four aims to realise, *viz.*, (a) to help the formation of character; (b) to cultivate the intellect; (c) to cultivate the body; (d) to prepare for a profession or career. Now let us see how far a co-educational school helps the realisation of these aims. During recent years, there has been a movement in the west for the application of psychology to education. The result of this application is the discovery that there are fundamental physical and intellectual differences between boys and girls, for instance, adolescence tends to begin earlier for the girl than for the boy. This earlier physical maturity is accompanied by more rapid intellectual growth. Between the years of 15 and 18, the intellectual development of the boy is accompanied by increasing capacity to stand the strain of hard, intellectual work. On the other hand girls suffer from over-strain. Competition with boys at this stage is, therefore, physically injurious to girls. Professor Welton, in his *Psychology of Education*, tells us that woman's outlook on the world is more determined by feeling than is that of man. But she does not care for abstract thought. Then again "girls," writes Professor Welton, "do well in all that demands neither originality of thought nor abstraction. Thus they quite keep pace with boys or even surpass them, in the earlier school-studies, which deal essentially with

concrete wholes." He, however, admits the superiority of the girl in point of memory, power of imitation and appreciation of beauty.

Taking a stand on psychological facts like these, it is possible to maintain that co-education may be adopted with advantage only in the early stages of instruction. If continued further, it is bound to be detrimental both to boys and girls. To this it is replied that the objection is valid, if co-education means "Boys and girls are taught the same things at the same time, in the same place, by the same faculty, with the same methods and under the same regimen." It is not, as Professor Welton contends, that the advocacy of mixed schools is inspired by the conception that true evolution means the gradual elimination of the difference of sex. The question really is not whether there are mental and physical differences between boys and girls, but whether the differences are so profound that it is impossible to educate them together without mutual injury. By means of an elective curriculum with a system of elastics, it is possible to relegate the sex distinction to a position of minor importance, as is done in America. It appears to us, however, that the possibility of the adoption of an elastic curriculum with a system of electives depends largely upon the strength and the character of the staff and also on the efficiency of organisation. Then again as long as the curriculum is governed by the demands of external examinations which do not allow for sex-distinction, the intellectual harm will be then for both the sexes. Then again we may complain against co-education on the ground of vocational training. It may be argued that boys and

girls are destined to different careers and accordingly require different subjects of study and different methods of training. In spite of woman's vigorous competition with man in all possible pursuits, the broad fact remains that the majority of girls are destined to be wives and mothers, and this destiny must be kept in view as the main object of girls' education. It may, however, be pointed out that this objection is not so much against co-education as against the higher education of girls generally. The movement for the higher education of girls had to justify itself. In course of time it was proved that girls could compete successfully with boys in all subjects. In this struggle the domestic subjects were naturally cast into the shade. Indeed the western countries are confronted with a serious problem in regard to the higher education of girls. The passion for economic independence has grown to such an extent that the lack of appreciation of the dignity and holiness of parenthood has become so obvious as to cause anxiety. Now if woman is fit for any career, as is maintained by militant feminists, then there is no argument against co-education. If on the other hand, she is fit for particular careers, then so far as the question of gaining a livelihood is concerned, it appears that the separation of the sexes seems essential, although we are not inclined to deny the possibility of meeting this difficulty, by arranging for a certain differentiation of work to enable girls to study subjects connected with the careers open to them. It is also possible that co-education may counteract the militant tendency of woman's movement. At any rate in a well-managed co-educational school there is an atmosphere where boys and girls may come to know each other, and in course of

time may learn that it is better for man and woman to live by co-operation and mutual adaptation than by unrestricted competition.

Let us next consider the so-called historical argument against co-education. Professor Stanley Hall tells us that co-education "violates a custom so universal that it seems to express a fundamental instinct. In all ages of history, and in all stages of civilisation.....with few exceptions in modern Europe, the dawn of puberty is marked by the segregation of the sexes, especially for every purpose that can be called educational." It is, therefore, argued that the custom of training boys and girls together is very ancient. But as Professor Dill tells us, the separate school system is a mediæval innovation. With the fall of the great Roman Empire under the invading barbarians and the rise of Christian Europe, learning and education became the exclusive property of the Catholic church. Now since the only teachers were religious persons, bound to life-long celibacy, it naturally followed that these monks and nuns confined their instruction to those of their own sex. Hence arose the custom of separating boys and girls which has managed to survive till to-day. Another factor which has operated in the direction of segregation is the subjection of woman. Until very recently women were regarded as tender and graceful plants in the garden of man's pleasures. The possibility of co-education pre-supposes equality of status for both the sexes. And until this principle is generally recognised, the question of co-education does not arise. But even supposing that at the time of puberty segregation is a natural necessity, co-education does not mean that the boys and girls must be together for all the 24 hours of the day. As a matter of

fact it is possible to give each boy or girl a few hours when he or she could be all alone. As co-education makes it possible for young persons verging on puberty to engage themselves in healthy pursuits, it is more than possible that it will prevent them from spending too much time on morbid thinking about the opposite sex.

On the other hand, the segregation of one sex from the other produces a kind of sex strain which at its best is unhealthy and at its worst leads to accentuation or perversion of the sexual impulse. The separate school system appears to be inspired merely by a negative ideal. It simply professes to put the boy or the girl away from the temptation of sex. The basis of sex-attraction is both physical and psychical. Indeed the need of one sex for the other, which is felt all the world over and in all ages, clearly indicates that there is something complementary in their natures. It appears doubtful if the civilised world has fully realised the spiritual significance of sex-relation. Ordinarily it is assumed that the attraction between man and woman is purely physical. It is dimly realised that a man cannot develop the whole of his personality unless he comes under the influence of the other sex. The same is true in regard to woman.

On the strength of the half-truth that the attraction is physical, it is feared that to allow boys and girls to mix together, especially during adolescence, is to court evil. Now let us see how it is possible for a well-organised co-educational institution to exert a positive influence on the side of purity. When boys and girls are educated together, the presence of boys corrects what may be wrong in the moral balance of the girls, and

the presence of girls tends to abolish the pernicious sex-strain which arises among boys when alone. It is said that the influence of the feminine sex on the side of purity has been one of the strongest forces working for good in the world. In the relationship between the sexes, the woman has on her side more dignity, more reserve and greater discretion. The presence of boys puts the girl on her dignity. The constant intercourse with them calls for the exercise of a continual discretion. She gets an opportunity to give a concrete expression to her sympathetic nature and thus to prevent morbid introspection. In this way the artificial sex-strain peculiar to separate institutions is likely to disappear as a consequence of the natural and wholesome intercourse of boys and girls in and out of school. A good co-educational school creates a social atmosphere which obviates the danger of sudden sentimental outbreaks which tend to occur when the emotional life is driven underground. As against this moral advantage, we may set up the possibility of an unwise attachment between boys and girls as also of an unnatural flirtation between younger masters and elder girls or younger mistresses and elder boys. But it is not fair to exaggerate this danger by generalising from isolated cases—a common tendency especially in regard to social matters. In this connection the following pertinent observations may be made. There is far less sentiment about the co-educational school than is generally imagined. The normal attitude between boys and girls in such schools is not one of sentimental attraction but of frank and open intercourse. But as some temperaments are more susceptible than others, it is possible that there will be few cases of

silly sentimental attachments which may fructify into marriages. Hence the need of a careful supervision through simple but not oppressive rules. Then again we should remember that boys and girls at school are not introspective psychologists. In the full life of a properly-organised school, with its constant round of varied occupation, boys and girls find little temptation to morbid reflection. It is for this reason that boys and girls in a co-educational school do not regard each other in the way in which they do when they are in separate schools. Here sex attraction, given its appropriate object, finds its characteristic form not in desire but in devotion.

Before this article is brought to a close, its Conclusion will be useful to sum up the results of our examination.*

(a) In theory the basis of co-education is moral. As the co-educationists say:—"They want to bring home within the doors of schools." But can they do so? Is it possible that 500 boys and girls can live like brothers and sisters? Indeed the ideal of co-education reminds one of the Platonic ideal to convert a whole community into a family. As Aristotle pointed out long ago, what is true of a small circle cannot be true of a large one. Yet a well-organised co-educational school can do much to remove the sex-strain characteristic of pupils in separate schools.

(b) As the conditions of success are difficult to fulfil, there will always be some

* This examination is likely to be imperfect in consequence of the fact that it is based on a knowledge derived from books alone. This lack of personal experience is bound to give a certain degree of uncertainty to the conclusions reached. Nevertheless a sincere attempt has been made to keep my mind open.

schools in which the economic motive will predominate.

(c) The possibility of co-education presupposes the existence of a large number of educated women who would take to the profession of teaching.

(d) The system of electives and differentiation of work can only minimise the intellectual strain to which girls are exposed during adolescence. But as long as the pressure of external examinations is there, it is doubtful if girls will avail themselves of this system of electives with a view to avoid intellectual fatigue.

(e) Mere differentiation of work cannot solve the difficulty connected with vocational training. The moment you grant that woman's sphere, though not antagonistic, is different from man's, it follows that she required a separate training. After all training, which is based on mere adjustment in time-table and curriculum, cannot be very sound.

K. H. KELKAR.

Help from the following books is gratefully acknowledged:—

- (a) 'The Case for Co-education,' by Cecil Grant.
- (b) 'The Nature of Woman,' by Taylor.
- (c) 'The Adolescence,' by Stanley Hall.
- (d) 'The Educational Experiments in England,' by Alice Woods.

ELEMENTARY AND HUMANE EDUCATION FOR THE YOUNG WAGE-EARNER IN AMERICA.

1. FACTORIES AND NEW CONDITIONS.

IN America as in England the new industrial conditions of factory life compelled an overhauling of the system of secondary education. While production required a general skill and a quickened intelligence to understand applied sciences and manufacturing processes through machinery, education could not be considered merely as a literary accomplishment for the wealthy few in the country and should be broadened to suit the new economic conditions. The concentration of an army of unskilled workers in the cities created the problem of ~~the value of social discipline and municipal patriotism~~ into them the value of social discipline and municipal patriotism, if city wealth is to be conserved and economically utilised. Another problem which confronted the American cities was the incessant influx of foreigners from South-Eastern Europe who were pouring in factories in search of employment and who had yet to learn the English language. A still more difficult problem was how to control and regulate the growth of child labour in cities owing to the new industrial conditions. The factory industries have brought into the towns, the workers from the farms where their sons and daughters assisted them in agricultural operations and home duties. They have brought the country artisan into the cities where their sons could not be trained under the old apprentice system. And these young children had to enter the factories for unskilled and menial work, for even which they would become disqualified with their growing age, as employers only want cheap child labour for certain kinds of work. The

"blind alley jobs" which they consequently entered, only forced them to be ever shifting from job to job specially during the restless period of adolescence. Thus they derived neither instruction nor profit from their early employments and were being made useless for their whole lives and thus also for the State. The problem of adolescent education gathered intensity with the growth of trade unions and their cry for efficient State education. Educationists began to press the need for education during the period of adolescence and feel the intellectual wastage to the State by its neglect. Economists began to measure the loss in terms of wealth. With the examples before them of State initiative and action as in Germany in regard to education, politicians were impelled to emphasise the need for legislation to build up an industrially efficient State. The solution of the question naturally lay in introducing industrial education in the elementary and secondary courses of studies and imparting a general culture of efficient living and citizenship to the wage-earner. The scope of the present article is restricted to a consideration of the steps taken in America by the State, the employer and the voluntary agencies to give elementary and humane education to the adolescent wage-earner.

2. COMMISSIONS OF ENQUIRY.

Many of the States instituted commissions of enquiry, how best to educate the vast mass of unfortunate unskilled child labour which is forced with premature responsibilities of life, at an age when children of parents with decent competence or superfluous affluence walk the earth in free jollity and careless mirth. The State of Massachusetts appointed a Commission of Industrial and Technical Education in 1905. From every quarter the need for a reorganisation of education was

expressed by employers and employees, and social service agencies as the Y.M.C.A. who were conducting evening classes on technical subjects. The Commission remarked that what the youthful population have learnt till the age of 14 or 15 "has been dissipated by the time they are 18 or 19," that they were actually "more ignorant when they reach the age of citizenship than when they left the school," that there was "an army of not less than 25,000 boys and girls from 14 to 16 years of age, idle or in unskilled work," that the secondary education was bookish and literary, and that there was sure to be a decrease in the output and quality of factory production owing to the dearth of trained workmen. They proposed to increase the contents of elementary education by vocational studies, to introduce elective courses in the public High Schools as Industries, Agriculture and Home Economics, to start Evening Continuation Schools for wage-earning youths and Part Time-Schools for apprentices, with a view to impart theoretic knowledge side by side with workshop practice.

The Commission also recommended the formation of another Industrial Commission for another five years to study local conditions, and to start new schools adapted to the employments in the neighbourhood, and that the State should bear one half of the expenses of these new schools. In the same year (1906) an Act was passed appointing a State Commission to supervise Industrial Schools.

The Society for the Promotion of Industrial Education which was started in the year 1906 carried on an intense propaganda for the expansion of public schools with a vocational bias. Many States also began to study the local conditions so that students might be trained for the vocations in the District. The

American Federation of Labour appointed a Committee in 1909 which reported in 1912 for "the Union of the School House, the Home and the Workshop" in the education of Labour. With a deep earnestness they put the question before the State very strongly. "The State has provided schools to teach trade to the mentally, morally and physically deficient. By what right can we refuse the same chance for the normal boy or girl? Would it not be more sage to engraft industry upon our public school system and rather prevent pauperism, crime and premature orphanage? We think so and we do not beg it as a favour but we demand it as a right. The 90 per cent. who are going into normal occupations have the same right to the best preparation for their life's work that the State can give them as has the 10 per cent. who go into professions." And they recommended Continuation Schools to instruct the employees in those principles of arts and sciences which bear upon the trades either directly or indirectly.

The National Association of Manufacturers in their annual convention in the year 1912, adopted resolutions urging on the Government the need for the compulsory continuation classes for employees. All this agitation from 1906 had its effect in the organisation of Industrial Boards and the enactment of laws for industrial training in the several States.

3. REORGANISATION OF ELEMENTARY AND HIGH SCHOOL EDUCATION.

Massachusetts led the way and many States followed suit. The high school courses were broadened. Electives on agriculture, industries, and commerce for boys and domestic arts and sciences for girls were introduced in the last two years' course. Public Secondary

Schools increased largely in the cities. The Public School education was made free for rich and poor alike. The final years of the Elementary School (that is the seventh to the ninth grade) were so organised with vocational and high school courses as electives, that the boy might either leave for a profession or get instruction in languages, algebra and geometry, thus leading to the high schools preparatory for college classes. These were otherwise called the Junior High Schools. Special Trade and Technical Schools were instituted with a four years' course for the students who have finished their high school courses. Evening Trade Schools for employees also began to grow. Rural Schools were constituted in central places where students were transported by motor-buses during the day and provision was also made for rural hostels.

4. THE PROBLEM OF THE YOUNG EMPLOYEES.

But the problem of adolescent education could not be solved merely by providing equal opportunities for the education of all the citizens. Compulsory primary education in America began in the latter half of the 19th century but without a satisfactory Labour Law it could not be strictly enforced. The apathy of public opinion, the self-interest of the employer, the absence of school accommodation, all stood in the way of making school attendance compulsory. By 1908 many States had passed Child Labour and Compulsory Education Laws but they varied differently and were enforced with great laxity. So many children dropped out of schools even before they finished their eighth grade. There was the larger question of many children who had attained the age of 14 and finished the course, but who had not come to the required standard. There were

a number of foreigners who formed an illiterate mass of unskilled labour. Mere literacy could not give the necessary discrimination to the children to select suitable employment for themselves. Neither the parents could exert any influence over growing children who scouted them as they could make an independent living. Nor were the ideals of the average parenthood developed enough to realise its responsibility. The recognition of national duty by the leaders of education in respect of the conservation of children as a State resource, has led to the movement of vocational guidance in America from the year 1910.

5. VOCATIONAL GUIDANCE PRINCIPLES.

According to this method, the child should be so educated and supervised during the transition period from the school to employment that there would be a natural drop into the latter without the heart-rending hunting for jobs and shifting from post to post. The tendency in the child should be so developed by a variety of choices in the school that it would fit the right place and the only place in the vastly complicated machinery of the industrial society. A new science of human engineering is developing under the hands of educational psychologists who discovering by certain tests and appliances the traits of the youths and by carefully assorting the kinds of intelligence required for the several employments, choose the right persons for them. "With this end in view 28 psychologists have reported to the American Psychological Association that they are applying some form of psychological tests to the problem of vocational guidance in business efficiency, that thirty large industrial organisations are now financing a five-year experiment to find out whether or not mental tests and the methods of applied psychology really have any value in

helping employment managers to determine in advance the likelihood of success of the applicant for the position. (Bureau of Education, Washington, Vocational Guidance and the Public Schools, Bulletin No. 24, 1918).

6. VOCATIONAL GUIDANCE METHODS.

For the proper guidance of students to choose their vocations in life many methods have been adopted in America. In some of the High Schools the English and Civics lessons have been enlarged to include a systematic study of the vocations and their value in relation to individual students. Almost all of them have Vocational Guidance Bureaus to assist the students in getting employments when they leave the school. The teachers themselves, by their talks and conferences with the parents, advise them to continue the studies of their children and not utilise them for the pittance of a small wage to supplement their income. Some States have appointed State officers to guide the youths in selecting proper vocations. Private Social Service Agencies also conduct Placement Bureaus which supply information of the vacancies in the several factories and select young men for them.

7. THE EMPLOYMENT CERTIFICATE SYSTEM.

But it is the Employment Certificate System in the States with the happy co-operation of the parents, the employer and the teacher, that wisely guides the boys or girls during the period of adolescence to continue their studies or choose a vocation, searches out the unemployed and the truant children and drives them back to school, and facilitates there a re-discovery of their own powers and a better training for honourable living. Several States have appointed officers to certify the eligibility of youths for employment in factories. The methods of issuing such certificates vary

in the several States. A great impetus has been given by the War towards the conservation of children, and the Department of Child Labour (in America children include youths to the age of seventeen) under the able and energetic guidance of Miss Julia C. Lathrop is taking every possible step for the successful safe-guarding of the child from the age of 14 to 16 by the Employment Certificate system. The issuing officer of the certificates should be satisfied whether the age of the boy or girl entering the employment is in conformity with the Child Labour Law and their qualification, with the Compulsory Attendance Law. The minimum age for employment varies from 14 to 16 with and without exemptions for the different industrial occupations. The age of school-leaving is generally 14 but some States as Wisconsin have made it compulsory for child employees to attend part-time continuation classes till the age of 16; and the minimum qualification to leave the school varies in many States. As soon as the certificate is refused to a student on account of his physical or mental deficiency, he is sent to the school for defective children or entrusted to public nurses, or trained in common schools so that they may be better fit for employment after a few months. To prevent the aimless roaming in the streets in search of jobs, when a child gets his school record, some States prohibit pupils from leaving the school unless they have secured the employment certificate and also an employment. These certificates are mailed to the employer who employs the boy or girl. When the latter leaves the job, the former sends it at once to the Issuing Officer. The child is at once traced out by the truant officer and turned back to the school. The Issuing Officer works in close co-operation

with the Factory Inspector and the Compulsory Attendance officials so that the employers may not violate the Child Labour Laws and the employees may be promptly put in a school. He also supervises the working children in the factories till the age of 16, which gives him valuable information of bettering the conditions in the factory and adopting the curriculum of the Continuation Schools in relation to the capacity and employments of children.

8. THE ACHIEVEMENTS OF THE CONTINUATION CLASSES.

Compulsory Continuation Classes have grown in America from 1910 with an increasing sense of national duty on the part of the States. They prevent the children from drifting into "blind alley jobs." They steady the restless youth and by a general vocational training increase their confidence and prospects of a better life. They give a general citizenship training with a view to create an active interest in them for community and State affairs. They set before them a higher standard of life by teaching them principles of sanitary living. Many an illiterate foreigner struggles hard in these schools to acquire a knowledge of English and better his position in life. The schools have decreased the number of juvenile delinquents by directing their energy in healthy channels. They assist many children in the proper choice of their vocations. "In a report on continuation work in Boston, R. O. Smith showed that the continuation schools, as a public educational agency, prevented drifting in industry, reduced the number of juvenile misfits by helping minors to make a more intelligent choice of occupations and advanced young workers from unskilled to skilled trades

He cited 43 cases of boys and girls who have received guidance through the Continuation School at Boston." The value of these schools lies in bridging the gulf between the Elementary Schools which train the general powers of the student and the factory which demands specialised vocational skill. They supply "a laboratory of industrial environment" to the growing child who is to become a part of the productive and distributive machinery of the society. The compulsory continuation classes conducted in some States may be divided into (a) evening schools and (b) day-continuation schools.

9. EVENING SCHOOLS.

Evening Schools were conducted by private bodies in America even as early as the beginning of the 18th century. It was only in the 19th century that they became part of the Public school system and received grants from the State. By 1860, 15 cities had started public evening schools. During recent times Evening Trade and Technical Schools have increased to a great extent. Some States have compulsory evening schools for child employees between the ages 14 and 16, but the tendency is against the conduct of schools for general education in the evenings.

10. THE EVENING ELEMENTARY SCHOOL.

The evening schools may be classified as (a) Elementary Evening Schools, (b) High Schools, (c) Trade and Technical Schools. Public opinion is strongly against compulsory evening classes because students will be too tired after the hard day's labour to be able to attend them. These classes are intended for those who have not come up to the required educational standard according to the Compulsory Education Laws. They are mostly to be found in the States of

California, Colorado, Massachusetts, Nebraska, New Hampshire, New York, and Wisconsin. Illiterate minors over 17 are also required to attend them in New York and Wisconsin. The number of hours of study vary among the States, between 60 to 100 a year. In all the States, attendance at the Day Continuation Schools is deemed sufficient for exemption from the evening classes. Some of the evening schools only prepare the students to finish up the required courses for 'graduation' from the elementary school. After getting a general training some students join special Evening Schools which prepare them for clerkships by elementary commercial instruction and for factory employments by training them in general industrial processes. There are many schools attended by foreigners who try to pick up the English language in the quickest possible time. Educationists feel that these schools, instead of improving the children, only cramp their body and intellect and make them unfit for life. The result has been that part-time continuation schools conducted during the working hours of the factories have been greatly favoured in recent times.

11. THE EVENING HIGH SCHOOLS AND TRADE SCHOOLS.

The High Schools are attended by a higher type of students than those in the Elementary Schools. They are actuated by a desire of improving their vocational qualifications. The subjects taught are not directly vocational but impart general mathematical and scientific knowledge correlated to the workshop practice and factory labour. The schools give a training in industrial intelligence and in "the mental power to see beyond the task which occupies its hands for the moment, to the operations which have preceded and to

those which follow it.....the power to take in the whole process, knowledge of materials, ideas of cost, ideas of organisation, business sense and a conscience which recognises these obligations"—(Commission on Industrial and Technical Education, Mass. 1906, quoted Michael Sadler, Continuation Schools, page 659.) The subjects comprise courses in Drawing, Mathematics, English, Commercial subjects, Languages, Practical Physics and Chemistry, History and Political Economy. The students are allowed a free choice of units from any of these subjects. The tendency, of late, is more towards specialised vocational training and this is reflected in the growth of Trade and Technical Schools adapted to local conditions. Classes for girls in Home Economics, Dress-making, Millinery, Art and Design are also held in the Evening Schools. The Federal Vocational Education Law of 1917 has given a great impetus to the Evening Trade Schools teaching Agricultural, Industrial, Commercial and Home Economics subjects by allotting annually seven million dollars, to be distributed to the States on the basis of their population, and provided such grants are matched by equal amounts by the State or managers of the schools or both. Their value to a student of liberal education is negligible as their courses are purely vocational and impart little training in fine arts, morals and citizenship.

12. DAY CONTINUATION CLASSES: HOW FORMED.

Part-time continuation classes within the legal working hours have increased in recent times owing to the co-operation of the States, the employees and the Local Committees to remove illiteracy and give a liberal and occupational training for life. As mentioned above, the Federal Government gives grants

only to such Continuation Schools which devote at least three-fourths of their time to vocational training. These schools are supplemented by general continuation classes with a view to improve the average ability of the employee. Such classes are conducted by several States out of their own resources. Their objects are mainly to provide the necessary elementary knowledge of living in a well-ordered society, and also of the social obligations which are entailed on a citizen. Some States as Wisconsin and Pennsylvania, have organised classes according to the standards of the students and their occupations, adjusted their school timings to the working hours in the factories and opened new schools to accommodate the vast number of the employees. The Educational Boards gather three kinds of census, which give them complete data for starting these schools. The school census gives them an idea of the number of children available for Continuation Schools. The industrial census indicates the number of children employed and their different occupations. The grade census shows the attainment of each child. The Boards then arrange for conferences of the employers, the School Principals and the Overseers of the mills, so that the school programme may be adjusted to the work of the child.

13. STATE LEGISLATION FOR CONTINUATION SCHOOLS.

In the State of Wisconsin all children, whether employed or not, and not attending any of the Day Schools *must* attend the part-time schools between the ages of 14 and 17 for eight hours per week for a period of eight months and more, as the other Public Schools are in session. The hours of attendance are reckoned as part of the legal working hours

in factories which are 48 per week for boys under 16 and girls under 17, and 55 for boys 16 to 17. It is obligatory on the Board of Industrial Education to establish Continuation Schools in cities having more than 5000 inhabitants. In the State of Pennsylvania child employees between the ages of 14 to 16 must attend continuation schools for eight hours per week between 8 A.M. and 5 P.M. which is to be considered as part of the working hours in the factories. The schools are to be started by Local School Committees. In Michigan attendance is compulsory as soon as the schools are opened. In Indiana, Massachusetts and New York power is given to the Local Education Committees to enforce attendance of children between the ages of 14 and 16. Wherever compulsion is enforced, the parents and the employers are held liable for absence of children from schools.

14. HOW THE SYSTEM WORKS.

The Employment Certificate System facilitates the tracing out of the truant and irregular children and sending them back to school. In the beginning difficulties were created by the students themselves. They came determined to make trouble for having lost their wages for being absent from schools. "That they now realise the good of the schools is evident. They bring their difficulties to the teachers for help in solving them and their behaviour in class or on entering and leaving the school, is excellent"—(School and Employment in U.S.A., page 117, Vol. XXIX, by the Board of Education, England, 1914.) The employers whole-heartedly supported the Continuation Schools from the beginning for they wisely realised "that their work is going to be done better and their product carry a higher value by reason of the

more intelligent labour bestowed upon it." They assist the Education Boards with their advice in adopting the courses to suit the children. The children are divided into groups and by an alternate plan of work they attend the school for a few hours on two or three days, or half a day per week, and exchange places at the factory, thus relieving the next batch for the classes. Sometimes the employer keeps a "flying squadron" which relieves a group of children for the schools. The real difficulty in working the schools comes from the illiterate parents who grudge a few hours' absence of their children from their homes.

15. TYPES OF SCHOOLS.

The continuation classes for the general improvement of the youths may be divided into three kinds (a) general, (b) pre-vocational, and (c) trade extension classes. The latter are few in number and are started only if the students show sufficient knowledge for a higher training for clerkships and shop practice. They devote their time mainly to train the boy in the general industrial process in which he is employed. The pre-vocational school gives information to the boy about the shop work and fits him for the trade extension classes. The general classes consist mainly of primary and cultural courses. They devote half their time to the regular primary school lessons and the other half to discover the individual powers of the students and train them for citizenship duties. The courses are made flexible to suit the requirements of the grown-up youths and the information imparted is concretised by centering them round any topic of current and living interest.

16. COURSES OF STUDY.

The Federal Board for Vocational Education, in their Bulletin No. 30 of April 1919, have published a scheme of studies for general

continuation classes on the basis of the experience gained from their working in the several States. English is taught in these schools to train the boy in expressing his thoughts exactly and briefly. The English lessons consist of readings from newspapers and periodicals, letter-writing, "keeping records and reports of work done in clubs and memorising precepts, proverbs and poetry suitable to occasions." In regard to Arithmetic, students are generally drilled in problems of household marketing and accounting and calculation of wages.

The subject of citizenship is introduced through the direct and concrete knowledge of the boy of the Municipal, State and Federal institutions in his neighbourhood, and special emphasis is laid on the study of municipal services and administration. To evolve confidence in the youth and train him for leadership in clubs and organisations, a course of lessons is imparted on the local associations and their management. A Current Events Class is also conducted when news from local papers are read by the students and discussed. Another subject of social science which stimulates the interest of the boy in community welfare is Industrial Geography. The boy is made to think of the services rendered by the several occupations in supplying human wants; he learns about the regions where raw materials are produced, the methods of transport and the manufacturing processes. The whole thing is concretely done by referring to the occupation in which he is engaged. These three courses are taken up in alternate weeks for thirty minutes a week.

The course on physical training includes a theoretic course on personal hygiene, and gymnastics and games. General science is taught by lessons on gardening, domestic animals and the machine and power appliances used in daily life. The only practical

courses in these schools, conducted wherever possible, is handling of simple tools and machines for boys and practical home-making for girls. Practical Civics is taught through the Assemblies which are conducted every week by the students themselves who arrange for meetings and debates on school subjects and current topics, dramatic representations and dialogues, and school exhibitions. Every lesson occupies about half an hour and the minimum attendance required is for four hours a week for a period of 36 weeks.

17. PART-TIME VOLUNTARY SCHOOLS

for special vocational training in each industry are greatly favoured by the employers. Generally the employers do not control the schools, and the managing body consists of a Board of Trustees composed of local representatives including also representatives from the employing firms. This gives freedom for the staff in supervising the students and the latter do not feel a sense of subordination as they are not controlled by the employers. The employing firm pays partly for the expenses and the State and the Local Education Bodies pay the remaining. The schools do not cost much as the practical course is covered in the factory. The boys attend the school and the factory in alternate weeks for a period of four years. The great advantage of these schools is that, apart from the training of the mental capacity to understand the theory of industry, they give immense facilities for employees of different firms to come together and discuss problems of professional interest. They can be successful only if they are started for each industry separately, for, a single school of different vocations will become unwieldy, and detract much of the personal attention of the masters which is possible in schools organised for a single vocation. The training is thoroughly vocational though minor attention is

given to lessons on citizenship. Hence such schools fall outside the scope of the present article and there is no need to pursue the subject further.

18. THE PROBLEM IN INDIA.

Educationists in the West have come to realise that primary education leads to sheer waste of money, if it is not followed up by continuation schools for boys and girls till the age of 18. In India, especially, where the primary education course only extends to a period of five years, what the youths learn, they are sure to forget when they enter life, unless it is followed up by continuation schools. The Social Service Leagues in Bombay and Calcutta are conducting a number of night schools for employees with the co-operation of the Municipality and the employers but they need a great deal of consolidation. The problem is mainly of two kinds in India. There is the rural farmer boy who cannot be approached easily, unless, by good roads and local leaders, and whose little education he rapidly unlearns when he leaves the primary school. The Local Boards cannot be expected to undertake the responsibility of organising continuation schools unless private effort begins the experiment and shows a tangible record of work in maintaining them. The problem in the cities can be easily solved if employers show active sympathy on this question, and if Social Service Leagues co-ordinate their activities, undertake a survey of the number of illiterate employees and the localities where such schools can be easily started, and organise an educative campaign. Non-official effort should precede State organisation of such schools, for then only would the public be willing to bear any local education cess for maintaining them.

K. G. SIVASWAMI.

N.B.—The matter for the present article is taken from Michael Sadler's "Continuation Schools in England and Elsewhere," Comparative Education" by Peter Sandiford, "School and Employment in U.S.A." by Board of Education, England, Volume XXIX and the Bulletins of the years 1919 and 1920 of the Department of the Interior, Bureaus of Education and Child Labour, and the Federal Vocational Education Board.

SUPERVISION: WHAT IT IS AND WHAT IT OUGHT TO BE.

A SUBJECT of this kind naturally divides itself into various heads, viz., the present condition, persons fit to supervise, scheme of supervision, nature of supervision and its value.

At the present day, supervision in different schools, takes various forms. There is not one method or system but quite as varied as there are schools. In a sense, it may also be said, that what passes for a scheme, is no scheme at all in reality. In the hands of some Headmasters—what amount of superior intelligence they have, will be known soon—it has degenerated to the level of finding fault with the teachers who are not pliant. The supervision notes are full of remarks, good, bad, indifferent, not pertinent, out of the way, and more often vague and absurd, to say the least of it.

The following specimens from a supervision note-book, maintained by the Headmaster of a High School, afford a concrete illustration for this line of thinking:—"The incident was well narrated by the teacher but not well understood by the students," "the Indian History class, not held, why please?" "3rd exercise in composition done IV Form," "Gopalakrishnan's composition exercise, number 3, not corrected, why please?" "more of talking by the teacher than vigorous questioning" (without considering where talking should have been in place and where vigorous questioning was out of place, and claiming superior wisdom to decide the exact degree to which boys may be questioned). Remarks of this kind are often couched in language, essentially unidiomatic and grossly un-English. They betoken an indifferent attitude or innocence,

(another term for ignorance) on the supervisor's part. In the eyes of another Headmaster, of the like kidney, the notes of supervision may contain anything and everything concerning the teachers. From the act of sneezing (for want of a more common act capable of being described in decent language) to the most deliberate plotting—if teachers are capable of it—everything is dignified with pen and ink. One instance of a plot is either a request to keep the masters' attendance register in the masters' room or the enunciation of a principle in the distribution of prizes or things of the like, which in the eyes of most of the teachers will appear just and natural.

From supervision as it is, let us pass on to examine what it ought to be. The supervising master—let it be the Headmaster or the Senior Assistant—should not deliberately pick holes in a master's teaching but help him by virtue of his ripper experience to solve difficulties and he can offer exactly the solution for which the master has been searching possibly for years. At the present day, speaking of this Presidency at any rate, the Headmaster cannot very properly and successfully supervise the teaching in *all subjects in all classes* for the very reason that it is not humanly possible. The Headmaster happens to be either a Science graduate or Mathematics or History graduate but scarcely and very rarely a "double degreed" or "triple degreed man". Things being as they are, the Headmaster is not the proper supervising authority. He may therefore fittingly relegate the function of supervising to the Senior Assistants in charge of the subjects. This is the practice that obtains in some schools and it may be taken by other schools for general adoption.

XXVIII—89

Another device is that suggested by Mr. A. C. Miller, M.A., I.E.S., of Belgaum: "The amount of time at the disposal of a Headmaster for the purpose of supervising his staff varies in different schools according to the amount of office-work to be done and the number of teaching periods the Headmaster reserves for himself. As the supervision and guidance of the staff is of supreme importance, a Headmaster finds himself obliged to curtail his teaching periods and reduce his office-work to a minimum. This reduction of office-work can be effected by delegating certain portions of the work to the various members of the staff and by setting aside a part of each day for the submission of all applications from masters, boys and parents."

The persons fit to supervise having been considered, let us consider the scheme of supervision. The important things a Headmaster must supervise are writing and drawing. The writing as done by students in our schools is on the whole very bad, careless and untidy. Students are in the habit of taking down notes in the class in a *rough* note-book. This *rough* note-book should be expelled from the class-room, if carelessness, the handmaid of ignorance, is to be dispelled. Teachers should insist on all writing being done with reasonable care and neatness.

Another important subject for supervision is drawing. Drawing as taught in many of our schools to-day, does not get at the brain, train the boy to see, make him understand, help him towards any career for which he may specially be gifted or teach him to appreciate beauty of form or colour or arrangement. The Headmaster should realise the main object in the teaching of drawing and see that the unique opportunities for self-

expression afforded by the drawing periods are not wasted by the teachers or the students.

In other subjects, he has to see that his Assistants are working at a pretty rapid pace to get through the full amount prescribed by the end of the year, to see that the teaching is practical and that all boys are questioned in a class. He may now and then—he need not actually invade the classes taught by the Senior Assistants—demand what progress they are making, and what their views are, as embodied in their supervision notes on the teaching of subjects in the lower classes.

He must see eye to eye with the Senior Assistants and take their expert advice in their subjects. He need not enter vague remarks concerning them in the supervision note-book often conveying little or no meaning. He must get to know their difficulties and try to obviate them. Here again, one thing may be noticed. The good work turned out by any school depends on the cordial and happy relations between the Headmaster and the Assistants. When the Headmaster happens to be either ignorant or tactless or unfortunately both at the same time, he will feel his position irksome and under such circumstances, he must first realise his limitations and have recourse to the policy of decentralisation as already foreshadowed. He must cultivate a spirit of toleration and brotherly sympathy and solicitude, if not a patronising air. He must not maintain a chilly distance and must not affect a certain reserve, coldness and aloofness of attitude (the separate room makes for that a good deal). He must extend the hand of fellowship to all teachers. Above all, he must realise that he is *primus inter pares*. When Headmasters, as men in advanced years are,

happen to be of a serious temper, "they must often take delight in their contraries, as a relief from the oppressive excess of their own."

Adverting to the nature of supervision, it may be said at once that it all depends on the personality and capacity of the Headmaster. When the Headmaster is known to be a strict man, everything in the school may seem to go on smoothly. When the Headmaster is rather lax, the students in the first place have a tendency to slight his commands and thereby make it impossible for the Assistants to exercise any discipline worth the name. Strife and discord take the place of peace and harmony. Such a Headmaster would rather relegate supervision to some Senior Assistants. For purposes of supervision the Headmaster may simply go round the classes at work, without dropping into any. By merely listening to the teaching, he must be in a position to take stock of the situation in the class. The habit of "haunting" the class-room acts sometimes like an incubus on the teacher, who, otherwise, when left to himself, feels at home and grows enthusiastic in teaching the class. The incubus will not be felt, when the head of the institution really possesses intrinsic qualities of head and heart and when he has, besides ability, willingness to recognise and appreciate worth in others, but the incubus of an ignorant Headmaster dries up the springs of enthusiasm in the teacher and is hopeless! The motto of the enthusiastic teacher shall be 'Save me from this ignorant, un-inspiring soul of a Headmaster!!'

Under such circumstances as have been referred to, the value of supervision may be questioned. The answer is plain; the misuse or abuse of a system cannot form an argument for its abolition. The Headmaster, worth the name, very often guides the inexperienced teachers, influences and is influenced by his other Assistants, and by means of his tact and wisdom, pilots his vessel wearily through many a stress and storm.

ASSISTANT MASTER.

THE RESPONSIBILITIES OF A TEACHER AND THE OBSTACLES IN THE WAY.

THOUGH the subject has been fully treated several times in the columns of this journal as well as elsewhere under one name or another, its importance will enable it to bear repetition any number of times. Moreover, the obstacles that stand in the way of the teacher discharging his duties have not, in my opinion, been given so much prominence as they deserve and this is the main object of the contribution.

The responsibilities of a teacher are far wider, far more indeterminate and liable to far greater neglect than those of a member of any other profession. A clerk has to dispose of papers; a judge has to deal with the facts placed before him; a registrar has to register documents. What is the work of a teacher? Is it merely the teaching of History and Geography and of Language and Mathematics? If it were only this, even then, I fear, it is not effectively done.

Lest I should be charged with making a generalisation of a too sweeping character, let me explain at once what I mean by saying that the work is not effectively done. A teacher is entrusted with a certain number of pupils who are to be taught in a particular subject; he is hardly able to make even a third of the number understand the subject clearly. Perhaps you may be disposed to say that it is not due entirely to the teacher's fault, but I am not prepared to accept that it is due entirely to the fault of the pupils. Whose fault is it then? I shall have occasion to refer to this again in dealing with the obstacles that stand in the teacher's way; so without dilating upon it any further just now I shall go on to consider what other work the teacher has to do in addition to his teaching work.

The school is said, by some, to be a factory where a nation is manufactured and the preparation of true and patriotic citizens is said to lie on the shoulders of the teacher. If so, the sphere of his responsibility extends over the body, mind and spirit of the child. A nation is what it is, because the teacher has made it so. The horrors of the recent world war, the spectre of which haunts us still, are laid at the door of the German professors; a wonderful revolution of a very peaceful nature is said to have been brought about by the school-masters of a certain country and that in a single night, the king of the country awoke one morning and found himself dethroned and a Republic established in the place of monarchy. Are the teachers of India, then, responsible for the present condition of India? My opinion is they are.

It is true that a pupil is subject to various other influences which mar the effect of the teacher's influence over him; but it is also true that a pupil is more amenable to the influence of a teacher than to that of any other. If the teacher does not exert his influence in such a way as to counteract the evil effects of the various other influences to which a pupil is subject, he is certainly guilty of not having done that for which a pupil has been entrusted to his care. Since a boy especially in his childhood imitates his teacher more than he does any other, the teacher must be careful to avoid those habits which, when they are prevalent among boys, are productive of greatest harm to them, though the very same habits may be considered to be harmless luxuries in men. A teacher has to teach by precepts as well as by examples; so it happens that he has to do certain things and avoid certain other things not because of any good or harm which they may do him but because there are others who imitate him and are likely to be affected thereby. I am glad to be able to quote an authority of very

great value on this point. Sri Krishna in his Gita, after comparing Action with Renunciation of Action much to the advantage of the latter, says that even those who follow the path of renunciation must perform action with a view to set an example to the people at large. For, he says, "whatsoever a great man doeth that other men also do; the people follow the standard set up by him." Though non-performance of action may not affect a great man with a balanced mind who has reached the height of perfection, it will surely be harmful if adopted by men in the lower rungs of the ladder who would be sure to imitate him. The teacher is certainly a very great man in the eyes of the boys and they imitate him. Very great, therefore, is the responsibility of a teacher for the habits of his pupils.

There is a proverb in Tamil about irresponsible life which says: "We have grazed the cattle and thrown down the rod." This, by some, is said to be the peculiar fortune of a teacher and we have seen and heard men of other professions envying the teacher in this respect; but if we examine a little more closely, we shall find that the shaping of the world's destiny is in the hands of the teacher and that he is responsible for it. So, we see how wide and indeterminate a teacher's responsibilities are.

The responsibilities of a teacher are also liable to far greater neglect than those of a member of any other profession. The amount of work which men of other professions have to do is precise and they can take their own time to do it. If a clerk is indisposed to work or if he has any pressing private business to attend to, he can put his official work by for some time and then with a little more exertion the next time he can compensate for the period wasted by him. With him, time is not a very great factor; but a single day or period—nay, even a minute—wasted by the

teacher is wasted for ever and can never be compensated for. What is to be taught in two periods or days cannot be taught in one; nor can it be done in his leisure hours without detriment to the interests of the pupils. Again slackness on the part of a member of any other profession can be very easily checked, both the quantity and quality of his work being capable of lending themselves to easy judgment; but slackness on the part of a teacher can be checked by no one but his own conscience. Any amount of supervision will not be able to spur him on to activity if he is disposed to be inactive; further he may put on a show of activity while he is in reality inactive. What should make the teacher earnest about his work is his own will and nothing else. With the teacher time is a very great factor; if it is used to the utmost advantage possible, his work can be said to be well-done; if not, it is certainly ill-done. The profession of a teacher affords him ample scope for bringing his fullest powers and energy into play in his work and his work is never over-done.

So, then, the responsibilities of a teacher will, by themselves, tax him his whole energy, even if he were given all possible facilities for discharging them; but alas! the profession of a teacher is a regular obstacle race and numerous and insurmountable are the obstacles he has to get over in the course.

The first obstacle, however, is his own lack of real and earnest enthusiasm for the work and this he must get over by his own unaided help; but this is not so easy as it appears at first sight. We are able to recognise far sooner and far more readily our enemies around us than we are able to recognise those that are in our own nature. While we exert ourselves to conquer or avoid our external enemies we allow our innate ones to grow more and more powerful until at last we are quite overpowered and find ourselves help-

less to resist them. We lose sight of them by their too close proximity to us and neglect them by our partiality to them—partiality even to enemies. We do not stop to consider how futile it is to try to conquer our enemies abroad, while we daily succumb to the tyranny of our enemies within. However hard the task may be, a teacher must get over this obstacle. Failing this he has no right to be in the teaching profession and he has no other to lay the blame upon for his inability to surmount it; but there are other obstacles, most formidable ones are they, that come from external sources and as they are quite insurmountable they must be completely cleared out of the course.

In addition to his onerous task of preparing the lessons he has to teach and going through the exercises of his pupils which require a calm mind free from cares, the teacher is constantly confronted with the insoluble problem of how to make both ends meet. It is true that the profession of a teacher was once a lucrative one, at least to start with, and many were lured into it by the comparatively higher initial salary, which, however, took many years to be augmented and that not to a very covetable extent. Many who started with a salary of Rs. 50 or 60 per mensem did not reach a salary of more than a hundred rupees, before they retired from service. But even these apparent advantages have now vanished. The market has gone very high and is still rising; money has depreciated by more than half its value; yet while the wages in all the other walks of life are more than doubled to conform to the market rates, the teacher is still receiving the salary allotted to him some decades ago. He is consequently forced to eke out his income by some means or other with the result that his energy and attention are dissipated and his teaching work suffers.

This is caused not only by the distracted attention and the dissipated energy of the teacher but also by something else. The two essential requisites of effective teaching are a calm mind and a good preparation on the part of a teacher and a properly classified set of boys even, attentive to the teacher's words. Imperfect classification, over-crowding of classes and want of regard for the teacher that is engendered in the minds of pupils, then, are the obstacles that present themselves next before the teacher in the course of his race.

If the boys of a class do not exceed a certain number—say between 25 and 30,—thereby enabling the teacher to pay individual attention to every one of them and if each of them is not below a certain standard, I do not see any reason why any one of them should be found unfit for promotion at the end of the year, unless it be due to the teacher's fault, or to the overloaded syllabus, or to the long absence of the boy owing to illness or other unavoidable circumstance which last case being providential, cannot be helped. It is my firm conviction that it is possible for every one to attain to a certain standard of proficiency in any subject though it may not be possible to reach a very high standard of excellence in it, but the presence of pupils in a class to which they are not fit is prejudicial to the interests of the average pupils of that class; for their progress is retarded by the extra attention which the teacher might be forced to devote to the backward boys whom he cannot completely ignore. The effect of this will be, not the improvement of the backward boys, but the deterioration of the forward ones. We thus see that overcrowding of classes and laxity in promotion result in lowering the standard of the whole class. This goes on indefinitely until at last the standard of the whole school comes to a stage similar to that which the schools of our Presidency seem to have at present reached,

as may be seen from the results of the Public examinations.

I shall close the list of obstacles with the one which seems to me to be more formidable than those I have already described. This is the want of regard to teachers which is engendered in the minds of pupils. This is a more serious obstacle than it appears to be at first sight; for it is impossible for any pupil to learn anything from a teacher for whom he feels no respect. This is true not only in the moral sphere but in the intellectual sphere as well. To a pupil his teacher must be the greatest authority on the subject taught and therefore the latter must be careful not to commit even a very small error in the presence of his pupils. Such trifles will have the effect of unsettling even a very deep regard which the pupils might have had for him and when once it is shaken it will be impossible to replant it and make it attain its original position. But this most important desideratum is not to be acquired by the individual efforts of the teacher alone. There are various other causes that act counter to the endeavours of the teacher to command the respect of his pupils.

The position which the teacher holds in the present system of education is one of these causes. Unlike men of other similar professions such as doctors who are the guardians of medicine and lawyers who are the guardians of law, the teachers are the servants of the department which has assigned to itself the guardianship of education. The tendency that is visible in certain members of the profession to belittle the work of a brother teacher and that in the hearing of the boys acts also in the same direction. The profession of a teacher is the only one the members of which exhibit their professional jealousy in such an open and unrestrained manner that it produces an effect

similar to that produced by the position of the teacher in the department referred to above.

To do full justice to the responsibilities that devolve upon a teacher in the teeth of these obstacles is an impossibility. No wonder then that the state of education in the country is far from satisfactory and leaves room for very great improvement. If the nation wants to become great its education must be put on a sound basis and the teacher must rise equal to the occasion. He must take a real interest and feel genuine pleasure, as the venerable Bede did of old, in reading, writing and teaching. It is impossible to expect this of a teacher as long as he is confronted with the obstacles enumerated above. So they should all be cleared out of his path and he should be given a free hand in shaping the education of the country which shaping should evolve freely out of the actual teaching experience unfettered by any outside control.

N. DORAISWAMI AIYER.

TALISMANS AND CHARMS

For those People to Avoid all Sorts of Misfortunes and Enter the Gates of

Successful Life.

RS. A.

For Honour, Riches, Learning and Greatness	...	7-8
For Health, Physical Strength, &c.	...	7-0
For Power of Eloquence, Speeches, &c.	...	7-8
For Success in any Undertaking or Litigation, &c.	...	10-8
For Success in Sport, Racing, Cards, Games of Chance, &c.	...	7-8
For Success in Trade, and Business	...	10-0
For Men's Love to Women	...	7-8
For Women's Love to Men	...	10-0
For Love of Opposite Sex, attractive power	...	7-8
For Agricultural Prosperity, Farming, Good Crops, etc.	...	7-8
For Success in Mining Plumbago, &c.	...	100-0
Rabbi Solomon's Special Talisman for every success.	...	15-0
Specialty valued and worn by every successful	...	
Hebrew, 2nd quality	...	21-0
1st quality	...	30-0

NOTE.—A Money Order will bring the Talisman to your door. Always the full amount should be paid in advance. No V. P. P.

Extensive Life Readings ... Rs. 15.

D. A. RAM DUTH,

ASTROLOGER,

No. 30, (E.R.) Choku Street,
COLOMBO (CEYLON.)

SCIENCE AND EDUCATION.

NO elaborate course of argument is needed to show the large and potent part that science played in the life of the people of ancient India. Without Astronomy and Geometry, the daily life of the Hindu would suffer considerably. The daily relative positions of the zodiacal constellations, the calculations of lunar and solar eclipses, the positions of the moon's cusps and the conjunctions of the planets and stars, had to be known to the Hindu. Some of the Hindu *Poojas* and *Yagas* presuppose a considerable knowledge of science. In scientific calculations, our ancients had astonishingly short methods, which are not unknown to some of the present-day Hindu astronomers and astrologers of the old type. I may just refer here to *Lilavati* where it is said that the superficial extent of the globe on which we live can be calculated on the basis of the diameter and in accordance with a formula which is quite at one with the English formula for the same. The achievements of our ancients in the field of science were thus very remarkable. But, owing to natural decay and degeneration and the circulation of pernicious theories by half-read and ignorantly-read doctrinaires that our ancient books are of comparatively recent origin, inferior authorship, questionable authenticity and doubtful sanctity, we have grossly and infamously neglected the study of science. Now that the recent war has brought a gleam of light to our educational horizon and made us realise acutely the importance and value of scientific training, we should, as loyal and honest sons of those who shaped and moulded India's memorable past and as eager and well-meaning workers for the high and holy cause of the Motherland, resuscitate the study of science in all respects and in all its aspects. Let us consider some of the advan-

tages which flow from a sustained and exclusive pursuit of science.

In science, we aim at seeing, understanding and practically learning from the natural world round about us. The subject is therefore of the widest range and includes everything from the tiny grain of sand and the microscopic bacillus to the biggest suns in the starry realms. Its values are clear and distinct. It quickens and cultivates the faculty of observation, the power of accurate and rapid generalisation, and mental habit of method and arrangement. It fires up and trains inquisitive interests and continually keeps our admiration on the stretch. It has, by the discipline which its problems exercise, the power of expanding and strengthening our reasoning faculties.

The romantic aspect of science is intensely interesting. To learn it and reflect upon it, occupies the faculties, fills the mind, and produces certain as well as pure gratification. The extraordinary discoveries of Mechanical Philosophy, the wonderful truths of Optical Science, the phenomenal wonders of Chemistry, the prodigies which Astronomy opens to our view, the tracing of resemblances and relations between things which, to common apprehension, seem widely different, the striking beauty of the vegetable kingdom and of the structure of the Heavens—these and many others are bound to excite the wonder of any reflecting mind—nay, of any one but little accustomed to reflect. Hence it is that Herbert Spencer deals blows of manly prowess at what he considers the persistent outrage of a few dyspeptics who discount and even deny the romantic in science. He says:—"Is it not an absurd and almost sacrilegious belief that the more a man studies Nature, the less he reveres it? Think you that a drop of water which, to the vulgar eye is but a drop of water loses anything in the eye of the physicist who knows

that its elements are held together by a force which, if suddenly liberated, would produce a flash of lightning? Think you that what is carelessly looked upon by the uninitiated as a mere snow-flake, does not suggest higher associations to one who has seen through a microscope the wondrously varied and elegant forms of snow-crystals? Think you that the rounded rock marked with parallel scratches, calls up as much poetry in an ignorant mind as in the mind of a geologist, who knows that over this rock, a glacier slid a million years ago? The truth is that those who have never entered upon scientific pursuits are blind to most of the poetry by which they are surrounded. Whoever has not in youth collected plants and insects, knows not half the halo of interest which lanes and hedgerows can assume. Whoever has not sought for fossils has little idea of the poetical associations that surround the places where imbedded treasures were found. Whoever at the sea-side has not had a microscope and aquarium, has yet to learn what the highest pleasures of the sea-side are. Sad indeed is it to see how men occupy themselves with trivialities, and are indifferent to the grandest phenomena—care not to understand the architecture of the Heavens, but are deeply interested in some contemptible controversy about the intrigues of Mary Queen of Scots!—are learnedly critical over a Greek Ode and pass by without a glance at that grand epic written by the finger of God upon the strata of the earth!

Science ministers to practical interests. It materially benefits the nation and maintains it in plenty and comfort. In its achievements there is not only beauty and wonder but also beneficence and power. It labours to extend human happiness, economise human effort and to extinguish human pain. Its value to the agriculturist, horticulturist and the industrialist has only to be stated to be

accepted without murmur or demur. Plants and animals do not only furnish the whole supply of food and clothing for mankind but they constitute the main source of raw materials for commerce and are consequently the very life-blood of commerce. In our own land, many pieces of fertile land aggregating to several thousands of acres lie neglected; numberless streams roll their unused waters to the sea; spicy groves and other forest-areas rich in all kinds of commercial produce remain but insufficiently exploited; myriads of raw materials capable of being converted into manufactured articles in the country itself are either left to rot away or are exported to other countries for not much more than a nominal value. The industrial prosperity of India depends, it should be noticed, upon the way in which we press our scientific training and culture into service and in which we utilise the country's natural resources to the best possible advantage.

Science cultivates what is called the *scientific mood*. This mood consists in a passion for facts, a cautious precision of statement, and the realizing of the complexity of all situations. The life-histories of plants and animals, the phenomena of Matter and Energy and numerous other manifestations take us into many a secret recess of Nature's workshop and reveal to us the inter-relations of things in the web of life, the connection between nature activities and human activities, the attractions that subsist between plants and animals and the wonderful beauty and adaptability of form and structure of plant and animal bodies. Science clearly recognises that the plant is more than its parts and that the animal is more than its organs. In his capital book on the *Aims and Methods of Nature Study*, Dr. Rennie observes:—"It is well to emphasise the distinction between the germ on the one hand—microscopic, living, *essential*; on the other—all the

est, bulking larger, but after all, not living, accessory." This passage indicates a fundamental truth of Nature with which Indian Philosophy has long been quite familiar.

No less remarkable is the moral value of science. A thorough grounding in science, besides bringing with it an extensive acquaintance with the nature and disposition of man, the lower animals, and plants, cultivates some of our moral faculties. Science makes constant and persistent appeals to reason. Some of the problems of mundane existence and experience are so obstinate that they ever refuse to open their gates to the knocks of ordinary men. But at the touch of Ithuriel's spear, science, the said gates easily and immediately open. The truths of science are not accepted on authority alone; but all are at liberty to test and attest them. Every step in a scientific investigation is submitted to our judgment. As each investigation is made and each principle grasped, we feel the sense of satisfaction and confidence growing upon us. Those who found some branches of learning, dry and tedious at first, have generally become more and more interested as they went on: each difficulty overcome gives an additional relish to the pursuit, and makes us feel, as it were, that we have, by our work and labour, established a right of property in the subject, that we have conquered the world of knowledge, each province conquered being marked in turn with our mental survey-stones. From all this results that *independence* which is a most valuable element in character. Nor is this the only moral benefit conferred by scientific culture. When carried on, as it should always be, under the form of original research, it exercises perseverance and sincerity. Tyndall says of inductive inquiry, "it requires patient industry and a humble and conscientious accept-

ance of what Nature reveals. The first condition of success is an honest receptivity and a willingness to abandon all preconceived notions, however cherished, if they be found to contradict the truth." "Believe me," continues the learned Professor, "a self-renunciation which has something noble in it and of which the world never hears, is often enacted in the private experience of the true votary of Science."

Science finds entrance into the religious philosophy of the world. It has antiquated many doctrines, disintegrated others and compels many others to be re-adjusted. It has shown to us the ways of Nature and explained to us the various phenomena that go on around us. It has taught us how Nature does

"wield

The mighty frame; how build, unbuild, contrive,
To save appearances; how gird the sphere
With centric and eccentric scribbled o'er,
Cycle and Epicycle, Orb in Orb;"

and how man's dominion is inseparably bound up with scientific progress. Tennyson makes the latter point clear when he says:—

"The crowning race

Of those that eye to eye shall look on knowledge,
Under whose command is Earth and Earth's
And in their hand is Nature like an open book."

Vague and meaningless fears in respect of the stars above, the tall trees around, the stupendous mountains, the leap of cataracts into sunken glens, the brooks rippling over the stones, the rhythmical roar of the ocean, 'the tingling silentness of the midnight forest,' have been exposed and shamed by the magic wand of science. Science has drawn the Naiad from the river and the Dryad from the tree and disturbed the innocent festivities of Pan and Apollo. It has made impossible the sight of Proteus rising from the sea, the hearing of the old Triton blowing his wreathed horn, the swallowing of the sun

and the moon by Python and the ridiculously absurd notion that the heavenly bodies are so many globes and chandeliers hung up in the great blue canopy to give light to man. What a refreshing change has come upon man's religious conceptions! The frail creature, the slave of mean and meaningless fears, who assigned to every grotto, flower, river and valley, a genius, who feared an alarming spectre might, at any moment, emerge out of darkness and take him off and who deified everything he could not explain, has, with the active aid and support of science, realised the sedative and corrective law of universal love, peace and harmony disclosed by Nature and attained the rapturous recognition of his identity with

"That Light whose smile kindles the universe
That Beauty in which all things work and move."

It may be interesting to examine the supposed antagonism between science and religion and the argument that an exclusive pursuit of science tends to dehumanise humanity. A shallow critic has remarked that poetry flourishes in an age of ignorance, that, as man begins to question and inquire, his wonder ceases and poetry which has its basis on wonder finds less and less material to work upon. It is now held that poetry is not a hater of light but a bringer of light, and if this is true of poetry, much more is it the case with religion. A man who has studied science would be more religious than an ignorant man; because his religion would be based on a stronger and stabler foundation. He would have realised the wonderful manifestations of life and energy in the world and the insignificance of man in time and space, in the scheme of the universe as taught by astronomy, and therefore his religion would be more rational and more acceptable than that of another. Let us call one or two eminent witnesses who have expressed themselves in

favour of the position advanced. We will first call Sir William Barrett, F.R.S., a distinguished physicist who started life as assistant to the late Professor Tyndall and whose testimony is hence of special weight. He says:—"Between nature and revelation, between science and religion, it is obvious that there can only be an apparent conflict due to the point of view taken on the one side or the other. For both yield us different aspects of the knowledge of God. Science reveals the garment of God, religion the heart of God; one teaches us His infinite wisdom, the other His infinite love; one appeals to us through the senses and reason, the other through our soul and higher intuitions; in a word, *science is the intellectual appreciation of God, religion the spiritual consciousness of His presence.*" Sir William Barrett who takes profound interest in psychical matters, thinks that miracles are neither impossible nor unlikely. "As regards the question of miracles, I am convinced that we cannot tear all the miracles from the New Testament, much less the cardinal principle of the resurrection of our Lord, without emasculating the Gospels and creating a new set of difficulties, historical, intellectual and moral. That a belief in the miracles of the Gospel narrative is consistent with the most rigorous knowledge of the laws and continuity of Nature is shown by the public utterances of men like Newton, Faraday, Kelvin, Stokes, Clerk Maxwell and others." To Sir William, *scientific observation and discovery reveal "not only the wisdom of the Creator in the seen but afford a window through which we can better see the vast scope of the divine purpose."* We can multiply authorities to show that the antagonism between science and religion is after all only apparent and not real. We trust these will suffice. The authorities adduced show such a uniformity

of opinion that too much stress cannot be laid on the aim and end of science which is to re-humanise de-humanised humanity

"Not only to keep down the base in man,
But teach high thought, and amiable words,
And love of truth, and all that makes a man."

Again, granting that matter and force are wanted to keep the world going, the human mind still craves for an original author for these agencies. The clock once set a-going may continue to work without further direction from the Master Hand. But the Master Hand has been at work at one time or other and perhaps will come into operation at all needful stages. The Ego which pries into the mysteries of that Master Hand is itself one of its products and it would be well-nigh parricide for this Ego to disown it. There is every reason to believe that, that self-same Master Hand has marked out for the Ego a process of Evolution, the crown of which is the absorption of the latter by the former. But that does not mean that the Ego is everything and that the Master Hand is superfluous as an Entity. Nay rather, when we consider the millions of aberrations that occur in human lives, we should become all the more humble and diffident of our powers. These powers, true wisdom whispers to us, shall come to naught, unless guided by that Master Hand. In the first flush of his discoveries, a scientist may be prone

"To assume the God

Affect to nod

And seem to shake the spheres."

But when subsequent reverses overtake him, it is ten to one that he shall be rudely recalled from his fancied omniscience and omnipotence, to his own insignificance, that he shall be made to recognise the sad truth that there are more things in heaven and earth than are dreamt of in his philosophy, and that an unbounded humility and love is man's first duty. It is well-known that the Germans gloated over the destructive work

that a superior scientific knowledge enabled them to carry out among the ranks of the friends of righteousness. Their asphyxiating gases, the havoc caused by their submarines to those who did not give them the least provocation, and the murder of innocents which they successfully carried on, with the bombs they dropped from their zeppelins, may be the marvel of those who, if they had the chance, would convert the whole world into snug heavenly quarters for themselves and who, for that purpose, would rid it of all those whom they consider undesirables and intruders. But both the hallucinated Germans and their "mean" admirers have now been brought to acknowledge that they pursued not only a wild goose chase but also a course that cost them more than it was worth. No; the province of science is far different from what is portrayed by the popular theory of the survival of the fittest, which the narrow-minded worldling, in his intense and overleaping selfishness, so readily hugs to his bosom. Its province is rather to show that the pleasures and pains of our animal being shall not count in the composition of the goal of human existence, that this goal is nothing but a column of white light of pure reason and that this column, like the physical sun that we see, shoots its rays to every imaginable part of the universe and, by abolishing contention and strife, makes it possible for every created object to fulfil its proper and legitimate function and enjoy the modicum of unalloyed and unending happiness. Let us realise, with all the fervour we can command, the significance of the time-honoured adage enjoining every one of us to love himself least. Then shall we have given the most powerful impetus to that march of science, which is the *sine qua non* of the salvation of the whole world and of the final solution of all the mysteries of creation.

P. ANANTHASWAMY.

THE BOMBAY COMPULSORY EDUCATION BILL.

A Bill to provide for compulsory elementary education and to make better provision for the management and control of primary education in the Bombay Presidency.

WHEREAS it is expedient to provide for compulsory elementary education and to make better provision for the management and control of primary education in the Presidency of Bombay and whereas the previous sanction of the Governor-General required by clause (c) of sub-section (3) of section 80-A of the Government of India Act has been obtained for the passing of this Act, it is hereby enacted as follows:—

1. (1) This Act may be called "The Bombay Primary Education Act, 1922."

(2) It extends to the whole of the Bombay Presidency except the City of Bombay.

2. In this Act, unless there is anything repugnant in the subject or context,

"approved school" means a place in which instruction in elementary education is given and which is for the time being approved by the School Board;

"area of compulsion" means the area in which elementary education is compulsory;

"to attend" an approved school means to be present for instruction at such school, on such days and at such time and for such periods on each day as may be required by the School Board with the approval of the Government;

"child" means a child whose age at the beginning of the school year is not less than six and not more than eleven years;

"city municipality" means a city municipality as defined in sub-section (1) of section 3 of the Bombay District Municipal Act, 1901;

"elementary education" means the education from time to time imparted in infant classes and vernacular standards I to IV inclusive and in European and English teaching schools and in

such other schools as the Government may prescribe in the first five standards;

"local authority" means a district local board, or a city municipality which is authorised by the Government to manage its own schools and includes, in the case of Aden, the Executive Committee of Aden;

"parent" includes a guardian and any person who has the actual custody of a child;

"prescribed" means prescribed by rules made by the Government for the purposes of this Act.

3. For every local authority there shall be a School Board. The School Board shall be constituted as prescribed and shall consist

of not less than ten and not more than fifteen members. Of these not more than three shall be appointed by the Government. The remaining members shall be elected by the local authority and shall include persons experienced in education, women, representatives of minorities, and, if the local authority is a district local board, representatives of municipalities in the district which are not authorised by the Government to manage their own schools.

4. The powers and duties of the School Board shall be as prescribed. It shall perform the duties of the local authority for which it is constituted in respect of

primary education and, if the local authority is a district local board, it shall also perform the like duties of the municipalities in the district which are not authorised by the Government to manage their own schools. The School Board shall also enforce the provisions of this Act.

5. Every municipality which is not authorised by the Government to manage its own schools shall on

the date to be notified by the Government in this behalf transfer to the district local board of the district in which it is situate all primary schools with their lands, buildings and

Oct. 1922.] THE BOMBAY COMPULSORY EDUCATION BILL.

equipment which vest in it and shall contribute annually to the said district local board for educational purposes such amount as may from time to time be fixed by the Government on the basis of the number of children of the municipal district receiving primary education from the district local board.

6. Where in any municipality a School Committee has been appointed under section 28 of the Bombay District Municipal Act, 1901, the control by that committee of primary education shall from a date to be notified by the Government in this behalf cease.

7. The local authority shall with the previous approval of the Government appoint an officer who shall be called the School Board Administrative Officer. He shall be the chief executive officer of the School Board and his pay, powers and duties shall be as prescribed.

8. (1) A local authority may by resolution declare its intention to provide compulsory elementary education in the whole or any part of the area subject to its jurisdiction in the case of children of either sex or both sexes and, if the local authority is a district local board, in any area subject to the jurisdiction of a municipality situate in the district not being a city municipality which is authorised to manage its own schools, and shall submit its proposals to the Government in the form of a scheme.

(2) A local authority, if called upon by the Government so to do, shall within a time to be specified by the Government submit a scheme to provide compulsory elementary education in such areas as above and in the case of children of either sex or both sexes as the Government may

9. The scheme shall contain the following particulars:—

Particulars to be contained in Scheme. (a) the area of compulsion; (b) a census of children of either sex or both sexes residing within such area and classified by communities and vernaculars;

(c) a list of existing and proposed schools indicating the private schools which will be approved schools;

(d) a schedule of existing and proposed teaching, inspecting and supervising staff;

(e) the manner in which provision will be made for the compulsory elementary education in their vernaculars of the children of all communities in the area of compulsion;

(f) the recurring cost of the scheme and how the local authority proposes to meet its share of it; and

(g) if there is a municipality which is not authorised to manage its own schools within the area of compulsion which the municipality in the opinion of the local authority should make.

10. The Government may after such enquiry as shall seem necessary either sanction such scheme with or without modification or refuse to sanction it.

11. If the scheme is sanctioned the Government shall agree to bear half the recurring annual cost of the scheme if the local authority is a municipality and two-thirds of the said cost if the local authority is a district local board not exceeding however half or two-thirds, as the case may be, of the cost as estimated by the local authority in the scheme as sanctioned.

12. When a scheme has been sanctioned the local authority shall make adequate provision for compulsory elementary education within the area of compulsion and no fee shall be

aged by the School Board in respect of the elementary education of any child.

13. A sanctioned scheme may with the sanction of the Government be withdrawn or from time to time modified by a local authority or may by an order published with the reasons for making it in the *Bombay Government Gazette* be modified, cancelled or temporarily suspended by the Government.

14. Approved schools shall at all times be open to inspection by the inspecting officers of the Government.

15. The subjects, curricula, books and standards of teaching of approved schools shall be as prescribed but may be altered by the School Board with the sanction of the Government to suit local requirements.

16. In every area of compulsion the parent of every child to whom a scheme applies shall in the absence of a reasonable excuse as hereinafter provided and if such parent and child ordinarily reside in such area cause such child to attend an approved school in such area.

17. A parent shall be deemed to have a reasonable excuse for failure to cause a child to attend an approved school in any of the following cases:—

(a) where the child is prevented from attending school by sickness, infirmity or other unavoidable cause;

(b) where the child is receiving, otherwise than in an approved school, instruction which in the opinion of the school board is efficient, or has received from the school a certificate of having already completed his elementary education;

(c) where there is no approved school within a distance to be fixed by the Government in con-

sultation with the School Board and measured according to the nearest road, from the residence of the child;

(d) where, after due application, entrance to an approved school has been refused to the child by reason of lack of accommodation or for other sufficient cause, until such time as the parent is notified that the child can be admitted;

(e) where there is no approved school in the locality in which instruction is given in the vernacular of the child.

18. (1) Where the School Board is satisfied that the parent of any child, who is bound under provisions of section 16 to cause such child to attend an approved school, has failed to do so, the School Board, after giving the parent an opportunity of being heard and after such enquiry as it considers necessary, may pass an order directing the parent to cause such child to attend an approved school on and from a date which shall be specified in the order.

(2) This power may be delegated by the School Board to a person or committee appointed by it.

19. (1) Any parent against whom an order with reference to a child has been passed under section 18 and who fails to comply with the provisions of section 16 with respect to such child on

and after the date specified in such order shall, if he resides in a town or village where there is a magistrate, on conviction by such magistrate, and, if he resides elsewhere on conviction by a revenue or police patel or other person empowered in this behalf by the District Magistrate, be liable to a fine not exceeding two rupees and, if such failure continues after such conviction he shall also on conviction by such magistrate, patel or person be liable to a fine of eight annas for every day that the failure continues or is repeated.

(2) No magistrate, patel or person shall take cognizance of an offence under subsection (1) ex-

cept on the complaint of the authority or person who passed the order under section 18.

20. (1) Whoever knowingly takes into his employment, either on his own behalf or on behalf of any other person any child in respect of whom the provisions of section 16 apply, so as to interfere with efficient instruction of such child, shall, on conviction before a magistrate, be liable to a fine not exceeding twenty-five rupees.

(2) No court shall take cognizance of an offence under this section except on the complaint of the School Board or the School Board Administrative Officer, and before making any complaint under this section against any person, the School Board or the School Board Administrative Officer, shall, unless such person has previously been convicted under this section in respect of the same child, cause a warning to be given to such person.

21. (1) If a fine imposed under section 19 or 20 by a magistrate, patel or person is paid it shall be credited to the local authority.

(2) If such fine be not paid the amount thereof shall be recoverable by the local authority in the same manner as an amount claimed on account of a tax.

22. An appeal from a conviction under section 19 by a patel or person shall lie to the nearest magistrate having jurisdiction in the town or village where the appellant resides.

23. The Government may by notification in the *Bombay Government Gazette* exempt any particular class or community in any area of compulsion or part thereof from the operation of this Act.

24. (1) If a local authority when called upon makes default in preparing a scheme or after a scheme has been sanctioned omits to make adequate provision for compulsory elemen-

tary education in accordance with a scheme as sanctioned and to bring into operation or continue to keep in operation such scheme the Government may after due enquiry appoint a person to prepare the scheme or to bring it into operation or to continue to keep it in operation, as the case may be, and the expense thereof shall be paid by the local authority to the Government.

(2) If the expense is not so paid the Government may make an order directing any person who has for the time being custody of any moneys on behalf of the local authority to pay such expense from such moneys as he may have in his hands or may from time to time receive and such person shall be bound to obey such order.

25. (1) The Government may by notification in the *Bombay Government Gazette* make rules for the purposes of this Act.

(2) In particular and without prejudice to the generality of the foregoing provision, such rules may determine the powers and duties of local authorities, School Boards and School Board Administrative Officers and their relations with the Government Educational Department and the conditions regarding the pay, qualifications and terms of employment of the teaching, inspecting and supervising staff.

26. The Bombay Primary Education (District Municipalities) Act, 1918, is hereby repealed.

Provided that in any municipal district where a notification under section 3 of that Act has issued the provisions of this Act shall from the date of repeal have effect as though the municipality had followed the procedure described in this Act.

STATEMENT OF OBJECTS AND REASONS.

The object of this Bill is to carry out the recommendations of the Committee appointed to consider the question of compulsory education. It provides the machinery necessary for the working of a scheme of compulsory elementary education by a local authority and the opportunity is

taken to make improved arrangements for the supply of primary education.

When this Bill comes into operation the duties of district local boards and municipalities in respect of primary education, other than the provision of funds, will be transferred to School Boards. There will be a School Board for each district local board and for each municipality which desires and is considered fit to manage its own schools. As the educational staff of some of the lesser municipalities is small it is found administratively convenient to have their primary schools managed by the district local boards of the districts in which such municipalities are situated. Such municipalities will however have representatives on the School Boards and the School Boards will also include members elected by the local authorities, representatives of minorities, persons experienced in education, women and Government nominees. In addition to performing the duties of the local authority, i. e., district local board or municipality, for which it is constituted in the matter of primary education it will be the duty of a School Board to enforce the provisions of the Act in respect of compulsory education. It is intended that the School Board should have more extended powers in the matter of primary education than are now exercised by the district local boards and municipalities.

It will be open to a local authority to declare by resolution its intention to provide compulsory elementary education in any part of the area subject to its jurisdiction. If the local authority is a district local board this area may include the area within the jurisdiction of a municipality in the district which is not for the reason given above authorised to manage its own schools. A proposal by a local authority to provide compulsory education will be submitted to Government in the form of a scheme and if the scheme is sanctioned by Government, Government will agree to bear half its recurring cost if the local authority is a municipality and two-thirds of such cost if the local authority is a district local board. In the case of a local authority which does not prepare such a scheme if called upon to do so or fails to bring a scheme into operation or to continue to keep it in operation it will be open to Government to have a scheme prepared or brought into operation or kept in operation as the case may be.

When a scheme is sanctioned by Government it will be worked on the lines of the Bombay Primary Education (District Municipalities) Act of 1918 by the School Boards, the chief difference being that under that Act free primary education

could be made compulsory in a municipal district only, whereas under this Act free elementary education, i. e., education such as given in infant classes and vernacular standards I to IV may, as finances admit, gradually be made compulsory throughout the Presidency except the City of Bombay.

Further details are given in the following notes on clauses.

Clauses 5 & 6.—As the duties of the lesser municipalities in the matter of primary education will be performed by School Boards which will have to be constituted, provision is made for the handing over of the school buildings, etc., by such municipalities on a date to be fixed by Government. From that date the School Committees of such municipalities will cease to control primary education. Provision is made for an annual contribution by such municipalities to the district local boards for the educational work done for them by the School Boards of the district local boards.

Clause 7.—Each School Board will have a chief executive officer to carry out its educational work.

Clause 10.—It is necessary that Government should have power to modify or reject a scheme of compulsory education as the proposed scheme might be far beyond the financial resources of Government.

Clause 12.—The difference between this clause and section 14 of the Act of 1918 is intentional. It is thought that where a scheme is in force as regards children of one sex only children of the other sex should be entitled to free education though it is not compulsory.

Clauses 16, 17, 18, 19, 20 & 21.—These follow the provisions of the Act of 1918 with slight differences. It is thought desirable to give the power of fining a parent who fails to send his child to school to the patel or other suitable person of the locality who may be appointed for this purpose and to avoid the necessity of recourse to a magistrate unless there is a magistrate in the village. In order that the patel or person appointed for this duty shall not abuse his powers, an appeal is provided by clause 22 to the magistrate.

Clause 26.—The Act of 1918 is no longer wanted and is repealed. As however compulsory education has been introduced under it in certain municipal districts it is proposed that it should continue to be enforced under this Act.—*The Collegian & Progress of India, No. 1, Sept. 1922.*

INDIAN SCHOOLS.*

By THE HON. MR. H. S. FREMANTLE, C.S.I., C.I.E.

IT was through Mr. Chintamani's kind offices that I was asked to take the chair this afternoon. I was very glad to take advantage of this occasion to meet you and to say something on the subject of education. Perhaps this will be the last occasion I shall have, because, after you have heard what I am going to say, it is very unlikely that either you or Mr. Chintamani will ask me to take the chair again. The Headmaster in his address said that this school is a nice double-storeyed building, well-planned after the model of European schools. When I first came to visit this school some ten days ago, knowing that I was to come here this afternoon I thought that from outside it was exactly like an English board school to look at. But there were certain differences. When I came inside, the first thing that I missed was nice pictures and photographs on the wall of the class-rooms and what one might expect to find in a secondary school such as this which teaches science, something in the way of a museum of interesting objects, nor did I see, what I should certainly see in any school in England, a play-ground used as such or any signs of a garden. It struck me too as rather strange that the boys did not make use of even the little bit of play-ground that they have. I happened to be there during one of the intervals and I saw the boys just loitering about inside the school. It was not a wet day. Really it seemed to me that there was very little vitality or energy about the boys in the school, certainly very much less than I would have expected to see in a school of this kind and certainly very much less than I would have seen in any English school of boys of similar age. I was told there was a project for fencing the play-ground and there was also a project for making a small garden. But there are no signs of any beginnings in that direction. After all if the boys do not use even the present play-ground there is not much use in improving it. In the same way for the sake of nature-study which I understand from the Headmaster's report is a compulsory subject up to the 8th class, the boys have not got even a little bit of a garden as big as this

* Address delivered on the occasion of the anniversary of the Government High School, Naini Tal.

table. Surely they might have made some kind of a garden for themselves by this time and so improved the efficiency of the school. Gardening, besides being useful in itself, would provide subjects for nature-study.

Now I am sorry to see these deficiencies both on their own account because I think they are more or less symbolical of the difference in education here and in places where, I will not say, it is better understood, but at any rate better practised. Particularly it struck me when noticing the keen attitude of the little boys in the lower classes and the dull attitude of the boys in the higher classes, that really what we are giving here is the dry bones of education with very little flesh and blood surrounding it. I should rather like to have seen some of these beautiful glass panes in the school broken as showing that there was some vitality among the boys. I feel quite sure, with apologies to Mr. Chintamani and the P. W. D., that if any panes of glass had been broken during the last year they would still have remained un-repaired as evidence of such vitality. I think it was Mr. Fisher who said when he went to a school and saw the boys look radiantly happy then he knew it was a good school. What I would like would be that the same could be said of our high schools in this country.

NATIONAL EDUCATION.

I would not like this school to be a slavish copy of the English school although I have tried to point out how much might be done to come up to that standard. Your school should be organised and managed in accordance with the genius of the country. I think there is a great deal of truth in the extract I am going to read to you from what I am afraid is a non-co-operation paper. It is called the "Servant." I believe it comes from Calcutta. What the "Servant" said with regard to our present system of education was this:—

"It does not produce in scholars either a mind that understands or a heart that sympathises with what has been of value in Indian life and tradition. It does not produce that temper, taste and training which will enable them to be in touch with the actual life lived in India to-day, that is, the life lived in thought, in feeling and practice by the Indian masses in the villages. It has made us veritable foreigners in the land of our birth."

The paper goes on to condemn exotic methods, material, such as costly and unnecessary furniture, benches, tables, etc., imposing buildings, noon-day classes, hostels, barracks, foreign dress, foreign games, over-crowded and dissipated urban surroundings, the foreign medium of instruction and the practical ignorance of national culture. Now, I think there is a great deal of truth in that. When I visited the Gurukula near Haridwar some three years ago, I was very pleased with a great deal of what I saw there. They have low and simple but commodious buildings—surely they are not imposing like this—it is situated in the country, well away from dissipated urban surroundings, it has gardens round it, it has a river close by in which the boys swim, it inculcates and enforces a plain standard of living, every boy has to keep a list of all the property he owns in the Gurukula and he is not allowed to have anything else. I do not approve of everything in connection with the Gurukula, especially with their politics, nor do I approve of the extent to which boys are separated from their parents. On the other hand, that institution is very much in accordance with the genius of the country. The medium of instruction there is the vernacular, as it is in the Oosmania University at Hyderabad.

My friend on the right mentioned to me before we began that there were very few boys in the school who took Sanskrit. I happened to notice in this year's report from the Director of Public Instruction that the number of schools and also the number of students taking Sanskrit has gone down by 20 per cent., which seems to be a very considerable fall in one year. Now, how can it be expected, with this decline in the study of Sanskrit, that due regard will be paid to the study of Hindu culture? I was reading recently a book by Mr. Radhakumud Mukerji called "Nationalism in Hindu Culture." He points to many patriotic passages in the Atharva Veda and other Vedas where ancient Hindu civilisation is described and shows how the snowy mountains, the great rivers and dense forests and other natural features of the country are mentioned with love and reverence in the holy book. This is the kind of thing which should appeal to you, living in the midst of these beautiful mountains and valleys.

It is sometimes said that patriotism cannot be taught in the school. I am quite certain it is not

taught in this school. When I came to visit I was present at part of a history lesson in the tenth class, and the subject was the Mahratta wars and Poona was mentioned. I asked the boys where Poona was. There was only one boy who gave any answer and he said it was two days' journey from Bombay. I do not know how he would travel between the two places; perhaps he would go on a bicycle. By the ordinary way of travelling it is very near. Then I asked the boys what great Indian patriot came from Poona. Five names were mentioned to me before they came to Mr. Gokhale whom we all know to be the most famous citizen of Poona. If it be said that patriotism cannot be taught in the school, I would just like to quote what Mr. Fisher, the Minister of Education in England, said. It was this:—

"I think that patriotism should be taught in the schools. What I mean by patriotism is not jingoism, but an intelligent appreciation of all things noble in the romances, in the literature and in the history of one's own country. Young people should be taught to admire what is great while they are at school."

I happened to receive only by this mail from England a new book by the Chief Scout, Sir Robert Baden-Powell, and in that I was interested to see what he said on this very point. He said:—

"In developing our patriotism we must not forget the danger of getting it perverted to a narrow nationalism. It is right to be proud of your country, but not to gas about it to the disparagement of others or to hoist it on a higher pedestal than it actually deserves. Your best patriotism is to help to raise your country's efficiency so that it can take its place adequately in the team of nations of the world. The great war has demonstrated a thing to which people were formerly blind, and that is that all countries are now very dependent on each other in their trade and commerce and only by mutual good-will and co-operation can the world be prosperous and happy."

That is the sort of patriotism that we want and there is no reason that I can see why it should not be taught in this school. With love of country (this is also said by the Chief Scout), love of nature also comes in—love of birds, trees and flowers. You know what Shakespeare said about this: Sermons in stones, tongues in trees, books in the babbling brooks and God in everything. The

'Quoran' also says: 'Seest thou not that all in the Heavens and all on the earth serveth God, the sun, the moon, the stars, the mountains and the trees and the beasts and many men.'

I have not gone through the whole programme of what the "Servant" said ought to be the changes in our present system of education. But I have no doubt that a very great deal could be done to bring the education in the schools more in touch with the genius of the country. I should be very much surprised for instance if I heard that the boys even in the 10th class knew much about the history of Almora and these hill districts. I think my friend the Director of Public Instruction will agree with me when I say that it is a principle of education to go from the known to the unknown, that is to say, that you should first learn about the things which you can see and which are familiar to you and only after that you should go into those distant regions of which you can only hear from books. So, when you require to study patriotism you should begin with your own country, with the mountains and valleys round you and ultimately from that you will come to the province and from that to India as a whole and then I hope that in course of time you will come to the Empire too. But the point is that if your studies in geography or history are to bear good fruit you should begin from your own homeland.

THE WAY OF REFORM.

In consequence of these facts, such as those I have described which the Nationalists and especially the non-co-operating section thereof consider to be inherent in English education as at present imparted in the schools, they formulated a scheme of starting their own schools. Those schools have hardly in any place succeeded and are gradually disappearing. It would have been far better if the Nationalists devoted their efforts to educating public opinion towards the reform where it is required (as I think it is required) in the existing system. If you make one small impression on my friend, Mr. Mackenzie, you will affect the whole system of High Schools in these Provinces. It is much easier than starting a school here and a school there. In 1916 in Allahabad there was a meeting at the Mayo Hall (I expect my friend, Mr. Chintamani, was present, but I am not sure), at which an Educational Association was

formed for the improvement of education in the Provinces. But so little has public opinion been really roused to the improvement of education that that Conference resulted, so far as I know, in practically nothing at all. What we want is constant efforts to be made to find out what is best in education, how it can be applied to this country and then by propaganda to popularise it and finally to bring it to the notice of the educational authorities.

So much I have to say about work in the school itself. But even if the schools were as efficient and as suitable to the genius of this country, there will still be a good deal to be done for the proper education of boys. I made a calculation this morning that there are 8760 hours in the year, and that of these 8760 hours, the number spent in school, giving five hours to the day, five days to the week and 42 weeks to the year, is 1100, i.e., the boy spends only about one-eighth of the time in school. What is he doing during the rest of the time? It depends of course a great deal on his home and what his parents are like. I have not, I am afraid, a very high opinion of parents. I always remember a story which I heard in Allahabad of a certain parent who was asked when a new Gymnastic class was going to be started whether he had any objection to allow his son to join it. As he thought gymnastics was a kind of advanced geometry he said he had no objection. Afterwards when he found out what gymnastics really was he told the Headmaster that he did not send his son to school to be made into a 'nat' and he should not join that class. No doubt parents are gradually improving because many of them have themselves been educated in schools and are expected to know at least what gymnastics is and will perhaps understand that education is not entirely mental but that there is a moral and physical side to it also. Even so there are many boys whose leisure period is not well utilised as things are at present. And it is chiefly for this reason that I am glad to see that the school has broken out in Scout movement and has no fewer than 40 Scouts. Even here I think there is some improvement which could be made. When the Seva Samiti Scouts were up here I spent a night out in their camp. Some of the Scouts from this school arrived on the scene. I do not know whether they

were afraid of catching cold or what was the reason, but they did not spend the night in camp. Nor did they take part in the games and other activities of the Scouts in the Seva Samiti camp. When physical exercises were going on, for instance, they stood aloof and looked on. That hardly shows the Scout spirit. Since that time Captain Barwell has been among them and I expect that they are very different from what they were. Certainly I was very pleased to see the Hindu drama which they staged the other night and I am very glad to think it must have made considerable addition to their funds. I hope that the result of the activities will bear fruit in the coming years.

BOY SCOUT MOVEMENT.

The object of the Boy Scout movement is, as the Chief Scout said, to supply healthy environments, ambitions and activities outside the school and the key-note of the Scout activities is, as you know, service to others. Service to others is not only useful from a material point of view, but it is the way to happiness. It is also, taking it on a rather lower scale, the way to success in life. If you want to be a credit to your school, to your family, to your parents and to yourselves you should all become Scouts. You know the Scout Law, I want to tell you shortly how every item in it fits in with your life-work. The first thing is: 'The Scout's honour is to be trusted.' If a man is not trustworthy, his business will decline and there will be no demand for his services. The next item is: 'You must be loyal.' What is the use of an employee who is not loyal to his master? 'You must be useful.' There are various things which the Scouts learn. They are all useful to them in their after-life. 'You must be a friend to all, and especially to a brother Scout.' 'You must not despise those who are not so well off as you or who have had less education than yourself.' The next thing is: 'You must be courteous to every one.' 'You must be friendly to animals.'

'You must obey your superiors,' and so on. What is the use of an employee who does not do what he is told to do? 'You must always be smiling.' 'You must have a sense of humour and be cheerful in the midst of hardships and difficulties.' Next, 'You must be thrifty.' If you are always hard up, you will not be able to help any other. 'You must be clean in your thought, word and deed.' Competition in life is getting more and more severe. This is especially the case in India, now where the number of middle classes who compete for employment is rapidly rising. It is not generally appreciated that if you go back 30 years, or still more, 50 years ago, the number of the middle classes would not be half of what they are to-day. That only shows that competition is keener than it was and will become keener still. In the face of such competition who is the boy who is going to succeed in life? I do not think it is the boy who has imbibed the most learning—even if, which is not likely, he may have assimilated it all. I think the boy who will succeed is the boy who has during his youth learnt to act according to those laws of the Scouts which I have mentioned. He is the boy of whom you may be quite sure that if you go away and do not supervise him he will still go on with his work in the same way as if you were there. He is the boy who will never be satisfied with a thing half done or incompletely done. He will always exert himself to do the job which is before him without complaint in the best way in which he can possibly do it. That is the boy who is going to succeed in life.

Gentlemen, I am very much obliged to you and especially those who do not understand English for listening to me so patiently. I feel confident that under your present Headmaster, if he is left with you, the school will progress and improve from year to year until it becomes a really first-class institution.

A Handbook of Manual Training or Educational Handwork in Paper and Card-Board Modelling

(in Tamil)

By S. YAGNASWAMI, Supervisor of Schools, Namakal.

Book I. Price As. 8.

SRINIVASA VARADACHARI & CO., TRIPLICANE, MADRAS.

Reviews and Notices.

MORE NATURE STORIES, BY H. WADDINGHAM SEERS.
(PUBLISHED BY HARRAP & CO., LONDON.)*

Nature-study as a formal subject in the Elementary school is often uninteresting to the child, because many teachers think that the bare truth should prevail, and present information concerning the sciences as a dry series of emasculated acts. The result is indifference towards what might be a keen pleasure. But if the nature lesson is presented in a manner that brings vivid pictures to the mind of the child, if he is given some vision of what cannot be understood by mere description, it becomes a living reality, and not only fixes information that is the foundation for scientific study later, but enlarges the emotional life and quickens the imagination. It gives him a feeling of close contact with nature and makes him so responsive to its varied life, moods and aspects that he comes to love it.

This can be done through story-telling. The careless child, the unobservant child, to whom a flower is just a flower or a bird a bunch of feathers can be led to open his eyes and see what he did not see before, while the one who has already found joy in the life of field and stream will respond with intense pleasure because a new and roseate light is flashed upon what is already familiar. This does not mean that all information should be presented through the medium of the story. The story should be used only to give information as is natural to story form and it is just at this point that the above book becomes so valuable and, both the author and the publisher, are to be congratulated on the book which should certainly find a place in the library of every school in this Presidency. The book is so excellently got-up that we should also recommend it as a prize and gift book instead of the silly trash that is so often presented.

THE HIGH DEEDS OF FINN, BY T. W. ROLLESTON.
(PUBLISHED BY HARRAP & CO., LONDON.)*

Ireland to-day is receiving much notice but unfortunately it is not exactly notice that is calculated to do any good to anyone; at a time like the present then this book of romances of Ireland comes with special interest, for it will help to give those who read the stories and those who tell it a wider view of life in Ireland than the press at the present time will allow them to take.

History in the early stages should be the accounts of great men and what they have done for the world and in the book we get a glimpse of the great men who worked for Ireland and in reading and telling the stories we cannot but be inspired by their thrilling deeds. We recommend it to all schools.

FAVOURITE FRENCH FAIRY TALES, BY BARBARA DOUGLAS. (PUBLISHED BY HARRAP & CO., LONDON.)*

The title of the book should have been 'Favourite Fairy Tales of the World.' The old favourites of every child of every race are here, adapted perhaps to the conditions of one particular country but not so adapted as to obscure the old stories that we heard at our grandmother's knees in the days that are very far off.

The Fairy tale grew out of the life of the race, it is primitive man's philosophy of Nature, his explanation of the working of processes he did not understand, and as they belonged to the childhood of the race so they are the natural heritage of the childhood of to-day—let no child be deprived of his heritage.

Every teacher should know these tales, but if only to remind him of his youth and to give him a thrill of pleasure which will be seldom felt in the world of reality we would recommend him to buy a copy of this book and thus regain some of his lost childhood. Every school library of course should have it even in these days of retrenchment in education but not in salaries and travelling allowances of often unnecessary officials to whom also we would strongly recommend this book of Fairy Tales.

"METHODS AND EXPERIMENTS IN MENTAL TESTS,"
BY C.A. RICHARDSON. (PUBLISHED BY HARRAP & CO., LONDON.)*

Mental Tests have only very recently been introduced to a few teachers in India and like all new things they are being "lodged for further reference ten years hence." The Teachers' College at Saidapet is as far as we know the only place where experiments are being carried on and a bulletin of the college has been published telling of something of the work which has been done up to now, but like every other experiment this too is being done under extreme difficulties, those doing the experiment have very little time and energy left after a hard day's work to take up this

* South Indian Agents: P. T. I. Book Depot, Bangalore.

most important part of Experimental Psychology. Men like Burt of London and Terman of America devoted years of their whole time to this work and yet we expect the already overworked people at Saidapet to devote their very scanty leisure to this work. In spite of this however they have done something as will be seen from a perusal of the bulletin, and the criticisms that we understand are occasionally received from people who know nothing or have read nothing about the subject but are wholly destructive in what they say, need only to be treated with the contempt they deserve.

One great difficulty in India with reference to these tests is want of books, and Messrs. Harrap have really done a service to us by introducing this book which we hope is to be the first of very many in the same series, then perhaps the public and those in authority will be able to see to importance of this most important subject which is used so widely in every country of the world and adequately provide for its inclusion into every school and college in India. We recommend the book to all who wish to keep abreast of the times.

DEDUCTIVE LOGIC (FOR INTERMEDIATE STUDENTS OF INDIAN UNIVERSITIES), BY MR. G. SATYANARAYANA MURTI, M.A., PROFESSOR OF HISTORY AND ECONOMICS, NOBLE COLLEGE, MASULIPATAM. Price Rs. 2.

The author has taken great pains to collect material from a large number of books on the subject and present it to the students of the Intermediate class in a well-arranged and exhaustive manner. With its copious diagrammatic illustrations and model exercises at the end of each chapter, the book will serve as a safe practical guide in their hands. The elaborate treatment of essential topics like the Connotation and the Denotation of Terms, the Laws of Thought, Function and Value of Syllogisms is likely to meet the requirements of the B. A. class students as well. The author has not altogether succeeded in avoiding controversial aspects, like those involved in the Laws of Thought, the import of Propositions, the inference in the hypothetical syllogisms, and the meaning of Definition. The relation between genus and species is not clearly brought out in the chapter on Predicables.

"A HISTORY OF KANARESE LITERATURE" (SECOND EDITION, REVISED AND ENLARGED), BY E. P. RICE, B.A. HERITAGE OF INDIA SERIES: (ASSOCIATION PRESS, CALCUTTA: 1921.)

We heartily welcome the Second Edition of "A History of Kanarese Literature" by Mr. E. P. Rice in the Heritage of India Series. In the present Edition the author has embodied a great deal of fresh information brought to light in the second volume of Mr. R. Narasimha Chariar's 'Lives of Kannada Poets,' which treats of the poets who flourished from the beginning of the 15th century to the end of the 17th century.

Mr. Rice has tried to bring the work up-to-date by introducing a chapter on the Modern Period." He complains in it that the scope of the work and limitation of space prevent him from enumerating the authors and writers of this period. He has, however, mentioned the classes of work "most characteristic" and named a few examples. The usefulness of the book would have been greatly enhanced if he had included the names of some of the best writers of the present day. He has also discussed in a few paragraphs the present position and prospects of Kanarese literature. He deplores the introduction of many Persian words and idioms into Kanarese during the period of Muhammadan rule in Mysore. He probably does not know what has happened to the Kanarese of the Southern Mahratta country, and evidently forgets that a language develops by borrowing from other languages just as English has done.

In the chapter on "Sanskrit Writers in the Kanarese Country" the author instead of saying that many of the Gurus of Sringeri, Mekote and Udipi Mathas may have been authors of learned Sanskrit works would have done well to discover if any works have been written by them.

This Edition greatly differs from the first. The chapter on Lingayat Literature has been almost entirely re-written. The addition of a large quantity of matter to the chapters on Jaina and Vaishnava literature has greatly enhanced the utility of the work. The author has, however, been obliged to omit the appendices and the account of the kingdoms and dynasties of the Kanarese country. He has introduced new and interesting matter such as the meaning of Syadvada, etc., and has corrected many of the inaccuracies found in the First Edition. We have no hesitation in saying that the book in its present form will as the author hopes prove more useful and reliable to all lovers of Kannada literature and contribute towards a better understanding and greater mutual sympathy between the East and the West.

THE SOUTH ARCOT DISTRICT TEACHERS' GUILD.

We are asked to publish the following:—

An ordinary meeting of the South Arcot District Teachers' Guild was held on the 14th inst. in the Board High School, Panruti. In the absence of the President, Mr. K. A. Nilakanta Sastri, Mr. V. Srinivasa Rangachariar of Villupuram was voted to the chair. More than fifty members were present. Mr. T. S. Krishnamurthi Ayyar, Inspector of Schools, also attended.

The meeting was a full day's session. Mr. M. P. Mariadoss of Panruti welcomed the members in a neat little speech. He chiefly referred to the poor recognition accorded by all alike to the responsible position which the teachers fill in the several departments of service in the country. He therefore urged for an immediate redress of the same if education was to progress on efficient lines.

The Joint Secretary, Mr. V. Jayaraman, in his report bespoke for the co-operation of the members for the starting of a quarterly organ for the Guild.

Two papers were then read on "The Teaching of Geography and of Elementary Mathematics" by Messrs. S. Rajangam Ayyar and S. R. Krishna-swami Ayyangar respectively, of Panruti.

After the close of the morning session at 11-15, the members paid a visit to the local Industrial School. It is under the management of the Danish Mission. Rev. V. Theil, the Manager, has concentrated attention on two departments, viz, weaving and carpentry. Weaving is carried on a large scale, several varieties of cotton fabric being made. The institution is a year old.

In the afternoon, a very important and instructive paper was read by Mr. A. Nagaraja Ayyar of Villupuram on what is known as the Basak Scheme now being introduced in Co-operative Societies. He showed by a clear comparative table how in the contributions under either of the present Local Body Provident Fund Scheme or the proposed Government Scheme much of the financial advantages inherent in Provident Fund Schemes is lost owing to the small rate of interest allowed on the investments. Under the Basak Scheme, a monthly contribution of Re. one for a period of thirty years

will aggregate to Rs. 1,019 the rate of interest being $6\frac{1}{2}\%$, whereas in the Local Body Provident Fund Scheme the aggregate of a similar contribution for a similar period comes to Rs. 685 and with an equal amount subscribed by the management and Government, to Rs. 1,370 only, because of the rate of interest being 4% ; in the proposed Government Provident Fund Scheme the aggregate amount for the same period with similar contribution comes to Rs. 1,152 only, the rate of interest being 3% . He pointed out how members could very well ignore the difference in the aggregate amounts under the Basak Scheme and other Schemes not only because it was not much but also because contributions under the Provident Fund Schemes are subject to much restriction before realisation while those under the Basak Scheme are not so. Therefore he concluded that the Basak Scheme was a very useful Provident Fund Scheme for teachers. He also showed how the so called contributions by the managements is very small inasmuch as they earn a large part of it by investing the teachers' contributions at a higher rate of interest than what they allow for the subscribers. A discussion followed. It was suggested that it was advantageous inasmuch as it admitted contributions suited to the financial convenience of teachers.

A resolution was passed asking for the change of interest in the proposed Government Provident Fund Scheme from 3 to $6\frac{1}{2}\%$ per cent, and, if it were not possible, to exempt subscribers to the Basak Scheme from contribution to the Provident Fund Scheme as is now proposed to do in the case of policy-holders in Life Insurance Companies.

The following resolution was also moved and carried: That managements be requested to make necessary increase in staff so as to allow two periods of leisure for every teacher."

In the evening, Mr. C. S. Rangaswami Ayyangar of Villupuram delivered a very informing lecture on "The Madras University Bill." Tracing the growth of University Education in India and with detailed reference to the Calcutta University Commission Report, he showed how the Bill is based upon its recommendations.

As the Report had conditioned University Reform on a large outlay of both capital and recurring expenditure, he asked how the Madras University could approach the ideal set forth in the Report unless large sums of money were forthcoming. However, it deserved support as it proposed to transform the present examining body into a teaching and residential one.

The meeting came to a close at 7 P.M. The President, in his concluding remarks, emphasised on the

importance of a consistent and constitutional agitation to secure due recognition of the teachers' status, urged the members to strive after the lofty ideals of the Guru, while agitating for better pay and prospects. He also put in a powerful plea for the immediate adoption of the mother-tongue as the medium of instruction in at least non-language subjects.

The Teachers' Association, Panruti, was 'At Home' to the members.

Third Edition—Just Ready—Price Re. 1-12-0.

A COURSE OF GENERAL MATHEMATICS FOR HIGH SCHOOLS

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

Crown 8vo. 400 pages with over 195 diagrams

By V. RAGHUNATHA AIYAR, B.A., L.T.

Assistant, Teachers' College, Saidapet.

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

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

A Manual of Arithmetic

By the late MR. S. RADHAKRISHNA AIYAR, B.A.,
Principal, Maharajah's College, Pudukotah.

Approved as a Text-book for all Classes and Forms.

Vide *Fort St. George Gazette*, 24th Jan 1907

Very useful for School-Leaving Certificate Examination

12th Edition (1921).—Price Rs. 2.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

The Educational Review.

The recommendations of the Com-

Indian Students abroad.

mittee appointed to consider the question of Indian Students abroad have just appeared and

they must be considered satisfactory though they are not very suggestive and remarkable. Nothing more could have been expected from a Committee who possessed no special academic experience and ability, some of whose members would seem to have been chosen only for their 'Moderate' politics and easy and safe opinions. The following is a brief summary of the recommendations; University bureaux should be expected to help students going abroad much better than the present miscellaneous advisory bodies in various Presidencies:—

The report of the Indian Students Committee considers that the only permanent solution of the problem is the development of education in India. It draws attention to the diminution of the number of Indian students proceeding abroad that would result in carrying out the recommendations of the Public Services Commission, Calcutta University Commission, Industrial Commission and Lord Haldane's suggestion to establish an Indian bar and considers that owing to the attitude of the students towards any purely official organisation, it is useless to recommend the continuance of the Indian Students Department as at present constituted. It suggests that each Indian University should establish a bureau advised by a board consisting mainly of persons with recent knowledge of British Universities in order to give information, advice and assistance to the students wishing to pursue education abroad and supply foreign Universities with information with regard to the

students which would enable them to make selection from applications. The bureau, expenses of which would be met by special Government grants, would replace the existing advisory committees. Students unconnected with any Indian University should apply direct to British Universities as at present. The needs of Indian students in the United Kingdom which cannot be met by British University authorities should be attended to by the High Commissioner but provision of residential hostels and organisation of recreation, hospitality and social intercourse should be left entirely to private enterprise. The Secretary of State or the High Commissioner should summon a conference of the representatives of all organisations interested in the welfare of Indians in Britain to discuss the best means of providing what was needed. To meet the special needs of the industrial students, strong panels of industrialists should be established in each province of India. A panel representing all the important industries should assist the High Commissioner who should be responsible for finding facilities for practical training in the United Kingdom.

We are glad that the official organisations in connection with the welfare and supervision of Indian Students in England will now be given a decent burial. They have been unpopular from the very beginning and have only succeeded in costing some money to the unfortunate Indian tax-payer.

The State of Bhopal has just received the advantage of an educational endowment which we would like to see repeated in the case of other Indian States in the country, where a good deal of money is generally wasted in show and extravagance. General Nawab

Obeidulla Khan, C. S. I., of Bhopal, has just given Government Securities of the value of four lakhs of rupees as an endowment, the interest on which amounting to Rs. 28,500 a year is to be utilised towards "the furtherance of religious, general and higher education." India is badly in need of such educational benefactors everywhere.

The Indian Social Reformer of Bombay has done a piece of service by bringing together the propositions passed by the various Legislative Councils in India on the important question of a Conscience Clause in schools. We had occasion to comment on the unwisdom of the Madras Council headed by the mis-called 'Justice' party which threw out a resolution accepting this elementary principle of religious liberty. The United Provinces and the Bombay Presidency have done much better. In the former the clause as finally approved by Government runs as follows:

(a) No one shall be compelled to attend any religious instruction or observance, as a condition of his admission into, or continuance in, an aided educational institution, if he, or his parent or guardian if he is a minor, objects to it and informs the authorities of the institution of his objection in writing.

(b) The time or times during which any religious observance is practised, or instruction in religious subjects is given at any meeting of an aided educational institution, shall be in the beginning or at the end, or at the beginning and end of such meeting.

NOTE.—Exemption from religious instruction or observance shall take effect from the commencement of a school or college term. Applications for exemptions should, therefore, be made at the commencement of a term. But with the sanction of the Headmaster or Principal, exemption may take effect at any time during the currency of a term.

This clause is to come into operation from the 1st April 1924, and thus missionary bodies have time either to adjust themselves to the new conditions or to close some of their educational activities in view of the restrictions now sought to be imposed on them. The following resolution which was accepted by the Bombay Council explains the position as far as that Province is considered:—

This Council recommends that the Government should see its way to introduce the following rule in the Grant-in-Aid Code:—"That in all schools and colleges, which are the only institutions of their kind in the neighbouring area, which are not purely denominational in the sense of refusing admission to pupils not belonging to any particular denomination, and which receive Government aid in any form whatsoever, the attendance by students at any class of special religious instruction which the parents or guardians of such students shall not have sanctioned, should be perfectly voluntary and that no payment of grant-in-aid should be made to any institution which will contravene the provisions of this rule.

What about the other Provinces in India? Are they in the blissful position of not having felt the need for such a Conscience Clause, in spite of the large number of Christian and other denominational institutions in them, flourishing with Government aid?

That in these days of enlightenment, when all the Universities of the Empire have admitted women to the full privileges of membership, the University of Cambridge should still persist in refusing to admit them to the full privileges of membership, is a matter worthy of the strongest condemnation. It is not surprising that the National Council of Women for Great Britain and Ireland should have protested the other day against this galling restriction. Lady Frances Balfour presided over an enthusiastic meeting when the following resolution was passed:—"That the National Council of the Women of Great Britain and Ireland believes that the exclusion of women from the membership of the University of Cambridge alone, among all Universities of the British Empire will, if continued, seriously impair the efficiency of the women's colleges at Cambridge; and urges His Majesty's Government to take steps in Parliament without delay to secure the admission of women into the University of Cambridge." In this struggle with the authorities for the recognition of the rights of women, the women of England will have the sympathy of the entire civilised world.

Reuter announces that the Imperial Educational Conference, the first after the war, will meet in London in June 1923. Delegates from all the Dominions and Colonies will discuss the status of teachers

and problems of the education of natives and vocational training. We do not know if *Reuter's* expression of "Dominions and Colonies" is intended to include India, but with the constant talk one hears, of the privileges of forming part of the great British Empire, it would be queer indeed if India is to be left out of the programme altogether. We are willing to await further developments. We imagine that apart from the Imperial idea in education which some of our Imperialist friends are anxious to emphasise, there are many problems relating to education in India which are somewhat similar to problems in other parts of the Empire, and it would be interesting to enter into a comparison of principles and methods.

In the latest number of the excellent series of annual progress reports issued under the auspices of the Government of India, in the survey for 1921-22, Prof. Rushbrook Williams rightly lays emphasis in the chapter relating to education, on the need for education in the country. The following are extracts from the report:—

"From all that has been said in the preceding pages of this chapter, it will be realised that the uplift of the Indian people, economic, physical and moral, really resolves itself into a question of education. Without education, the labourer, whether rural or urban, will continue poor and ignorant, while such exertions towards self-help as he may attempt will be misdirected and costly to the commu-

nity. Without education among women, hygienic progress among the masses is impossible and social reform in great measure a delusion. India's educational problems, framed as they are upon a gargantuan scale, must find their solution with proportionately large expenditure to a figure hitherto undreamed must be faced courageously and speedily, for without education, India will be confronted in no long time with that supreme peril of modern States, an uninformed democracy. Indeed from every point of view, education remains the prime question in India to-day. And among all those nation-building activities which have been transferred to Indian control and direction as a result of the Montagu-Chelmsford reforms, there is none more vital both for the present and for the future of India, than the education of her people to an enlightened citizenship." We wish our Ministers of Education realised the truth underlying these remarks and busied themselves with the real extension of education rather than with the finding of jobs for one's own unqualified castemen and adumbrating educational activities likely to further party-interests, without any lasting benefits to education—pursuits which seem to be active in Madras under the reformed constitution.

A recent function in connection with the Indian Women's Education Association in England was the occasion for a review of the progress of women's education in the

various provinces of India based in the main on the Government of India's Report on Public Instruction for 1921-22. Notwithstanding all that has been done in the direction in recent years, the disproportion in the percentage of men and women who are being educated continues to be quite serious. In the Presidency of Bombay there has been a satisfactory increase in the proportion of lady students in colleges. It is curious, however, that the Director of Public Instruction should state that at the colleges, "a few of the under-graduates are the equals of men," though he also adds, "every year there is less shyness and a greater readiness to converse on equal terms with tutors and students." It would appear there are as many as sixty-three women working side by side with men in the Bombay Medical College. In Secondary Schools, the number of girl-pupils has risen to over 10,000. Great progress is noticed in Madras, while in the case of Bengal, unfortunately, the progress has not been equally rapid. It is complained that attempts to divert girls' schools from the Matriculation course and to adjust their curricula to special needs have met with no response. An unnecessary burden is added to the expenditure, on account of arrangements which have to be made for the conveyance of girls to and from school because of purdah. The province however which seems to have made the most substantial progress is Burma, where we are told that higher scholarships are no longer reserved for girls, since they are "quite

able to hold their own against boys." We wish the same thing could be said of every province in India. Dr. Kate Platt, Principal of the Lady Hardinge College for Women at Delhi, drew attention to the great keenness she had noticed among Indian women for their intellectual advancement.

Dean Inge, speaking at a prize-distribution the other day in Liverpool, gave expression to a curious fear that there was a tendency to make teachers of all the clever boys in a school. It is surprising that the Dean should have come to such a conclusion, and he has been promptly contradicted by a number of people possessing more intimate acquaintance with conditions of school-life in England. The truth is stated by the correspondent who writes the following letter in the *Educational Supplement* of the *London Times* :—

The Dean said that there was some danger especially in the secondary schools, of making all the cleverest pupils into teachers. It is obviously not in the national interest that all the cleverest children should be induced to take up any one particular calling, as brains are required in every corner of every department of this extraordinarily complex society in which we live to-day. But if there is one calling more than any other into which, *ceteris paribus*, the cleverest children ought to be drafted, that calling is surely the teaching profession. The old idea that anybody can teach, when it is a question of choosing a teacher for somebody else's children, is not dead even yet, and the sooner it is killed the better for this country. On the other hand, there is not a parent but

thinks, and rightly thinks, that no one is too good in intellect, character, &c., to teach his own son, and the great majority of parents would be prepared to pay the price that the best demands. But authorities, *qua* authorities, have no children of their own, and are often satisfied to employ second or third-rate people as their teachers, if one is to judge by the price they are willing to pay.

As a matter of fact, the danger that Dean Inge has conjured up simply does not exist. The overwhelming majority of the cleverest children in our secondary schools prefer to enter into industrial or commercial life or into the more remunerative professions. It is an undeniable fact that only a very few of the cleverest children do gravitate to the teaching profession, and this is ample proof of the profound wisdom of the majority. The real danger lies not in the direction of inducing too many of the cleverest children into the teaching profession, but in the direction of not offering sufficient inducement to attract the best material in the country for the building up of a teaching profession worthy of its *raison d'être*.

We notice that the opposition to the Madras University Bill is growing in volume and several centres of education in Southern

India have already expressed themselves strongly against the proposed measure. In view however of the doctrine majority in the Council which the Ministers are now able to command, it is possible that the Bill may pass into a legislative enactment, but we hope the Ministry will not commit such a foolish mistake as to pass an educational measure in the face of so much opposition from the educationists themselves. The history of the Madras Uni-

iversity in the years which lie in the immediate future, is likely to be full of trouble, if the Act is forced on the mofussil colleges which are hit particularly hard by it. In spite of the fact that the work of reconstituting the Allahabad University was made easier by the establishment before the date, of unitary and residential Universities at Benares, Aligarh and Lucknow, the measure has not given any satisfaction to such mofussil centres as Agra and the trouble only promises to increase. We hope the lesson will not be lost sight of by those concerned with legislative activity in Southern India and will not be in a hurry to force it on the people concerned. A postponement of the measure is about the minimum step of caution that should be recommended in the matter.

BOMBAY UNIVERSITY EXAMINATIONS.

School Final 1923.

MATTHEW ARNOLD: SOHRAB AND RUSTUM, with Introduction and Notes, by BS. A. Mr. T. O. Hodges, B.A., Professor of English, Presidency College, Madras ... 1 0

B. A. 1923 and 1924.

SHAKESPEARE: MACBETH, with Introduction and Notes, by the Rev. J. Morrison, M.A., D.D., formerly Principal and Professor of English, General Assembly's Institution, Calcutta (College Classics) ... 1 6

—: MIDSUMMER NIGHT'S DREAM, with Introduction and Notes, by the Rev. R. Scott, M.A., Professor of English, Wilson College, Bombay (College Classics) ... 1 6

—: JULIUS CESAR, with Introduction and Notes, by Mr. Mark Hunter, M.A., Prof. of English, Presidency College, Madras (College Classics) ... 1 12

—: TWELFTH NIGHT, by Mr. Michael Macmillan, M.A., D.Litt., I.E.S. (Retired) English Lecturer in the University of Birmingham (Formerly Principal and Professor of English, Elphinstone College, Bombay) ... 1 12

SHELLEY: ADONAI, with Introduction and Notes, by Mr. W. E. Hoare, M.A., formerly Principal, Doveton College, Madras ... 0 10

MILTON: LYCIDAS, with Introduction and Notes, by Mr. N. Vaidyanatha Iyer, M.A., formerly of the Teachers' College, Saidapet ... 0 6

TENNYSON—GUINEVERE, with Introduction and Notes, by Mr. E. H. Elliot, B.A., formerly of the Presidency College, Madras ... 1 4

—THE TWO VOICES, with Introduction and Notes, by the same Author ... 1 4

M.A. 1923 and 1924.

SHAKESPEARE: OTHELLO, with Introduction and Notes, by Mr. Michael Macmillan, M.A., D. Litt., formerly Principal, Elphinstone College, Bombay (College Classics) ... 1 6

CHAUCEER: PROLOGUE, with Introduction and Notes, by Mr. W. J. Goodrich, M.A., formerly Principal, Pachaiyappa's College, Madras ... 1 2

—THE KNIGHT'S TALE, with Introduction and Notes, by the same Editor ... 1 2

SRINIVASA VARADACHARI & CO., TRIPLIQUANE, MADRAS.

A BOOK OF VERSE

Compiled primarily for Indian Boys and Girls

BY

Sir HENRY NEWBOLT, LL.D., D.Litt.

Price, Re. 1.

"This is an anthology of exceptional merit, one that could be made only by a good poet and a poet of faultless discrimination.....Many well-worn poems are found in the anthology, but what is more distinctive, numerous living poets have been drawn upon and quite the most interesting section is perhaps the work of Sir Henry Newbolt himself.....Of living poets ten little pieces from Walter de la Mare are quite perfect gems.....Altogether we have here an excellent 'up-to-date' anthology of poetry worthy of universal use and appreciation."
—*The Educational Review*, Madras.

K. & J. COOPER, Publishers, BOMBAY.

UNIVERSITY OF MADRAS.

Intermediate Examination, 1923. Rs. A. P.	
GRAY—ELEGY AND OTHER POEMS, with Introduction and Notes, by E. E. Kellett, M.A.	0 12 0
*TENNYSON—MORTE D'ARTHUR, with Introduction and Notes, by E. H. Elliot, B.A.	0 12 0
*—ODE ON THE DEATH OF THE DUKE OF WELLINGTON, with Introduction and Notes, by E. H. Elliot, B.A.	0 8 0
MATTHEW ARNOLD—RUGBY CHAPEL AND THE FORSAKEN MERMAN, with Introduction and Notes, by E. H. Elliot, B.A.	0 8 0
ADDISON—SELECTIONS FROM THE SPECTATOR, with Introduction and Notes, by E. H. Elliot, B.A. (Coverley Papers, &c.)	1 12 0
* Both the books together Re. 1.	
Shakespeare—Richard II, with Intr. and Notes, by Prof. J. C. Rollo, M.A. Mysore University.— <i>In the Press.</i>	
Intermediate Examination, 1924.	
MILTON—L'ALLEGRO AND IL PENSEROSO, with Introduction and Notes, by A. J. Grieve, B.A.	0 10 0
WORDSWORTH—SELECTIONS CONTAINING RESOLUTION AND INDEPENDENCE, AND OTHER POEMS, with Introduction and Notes, by E. H. Elliot, B.A.	0 12 0
TENNYSON—SELECTIONS containing MORTE D'ARTHUR, OENONE, ULYSSES, AND SIR GALAHAD, with Introduction and Notes, by E. H. Elliot, B.A.	0 14 0
TENNYSON—LOTOS-EATERS, with Introduction and Notes, by E. H. Elliot, B.A.	0 4 0
—POEMS, containing MORTE D'ARTHUR AND ODE ON THE DEATH OF THE DUKE OF WELLINGTON, OENONE, ULYSSES, THE LOTOS-EATERS AND SIR GALAHAD. Red Letter Library. Cloth bound 1 Re. Reduced to	0 12 0
B.A. Degree Examination, 1923	
MILTON—COMUS, with Introduction and Notes, by Dr. S. Sathianadhan, M.A. 2nd edition	0 12 0
CARLYLE—HERO AS MAN OF LETTERS, with Introduction and Notes, by E. E. Kellett, M.A.	0 12 0
SPENSER—PROTHALAMION, with Introduction and Notes by E. H. Elliot, B.A.	0 10 0
LESLIE STEPHEN—JOHNSON. English Men of Letters Series. Paper cover	0 9 0
Cloth	0 13 0
CARLYLE—HERO AS POET, with Introduction and Notes, by the Rev. S. Gnana-muthu, M.A.	0 8 0
B.A. Degree Examination, 1924.	
SPENSER—PROTHALAMION, with Introduction and Notes, by E. H. Elliot, B.A.	0 10 0
MILTON—COMUS, with Introduction and Notes, by Dr. S. Sathianadhan, M.A. 2nd edition	0 12 0
POPE—RAPE OF THE LOCK, with Introduction and Notes, by E. E. Kellett, M.A.	1 0 0
BROWNING—SAUL, with Introduction and Notes, by C. H. Payne, B.A.	0 12 0
*WORDSWORTH—SELECTIONS, containing On Revisiting the Wye above Tintern Abbey, Ode to Duty and other poems, with Introduction and Notes, by E. H. Elliot, B.A.	0 14 0
*WORDSWORTH—SELECTIONS, containing ODE ON INTIMATIONS OF IMMORTALITY, and another poem, with Introduction and Notes, by E. H. Elliot, B.A.	0 12 0
CARLYLE—HERO AS MAN OF LETTERS, with Introduction and Notes, by E. E. Kellett, M.A.	0 12 0
* Both together Re. 1-4-0.	
Other Intermediate and B.A. Books.	
INTERMEDIATE GEOMETRY (Theory and Practice) by M. Satyanarayana, M.A., L.T., and K. S. Patrachariar, M.A., L.T. 2nd and Revised Edition	2 8 0
THE STUDENT'S COMPANION TO GEOMETRY, for the Intermediate Examination of the University of Madras, under the New Regulations, by K. Deva Rao, B.A., L.T.	0 8 0
EXAMPLES ON TRIGONOMETRY, containing the F.A. Trigonometry Papers for 15 years, 1888 to 1902, with Solutions of all the Problems, by P. A. Subramania Aiyar, B.A., L.T.	0 8 0
EXAMPLES ON ALGEBRA, containing F.A. Algebra Papers for 17 years, 1889 to 1905, by the same author	0 8 0
INTERMEDIATE CHEMISTRY, by P. Lakshmi Narasu, B.A., Professor of Physical Science, Pachaiyappa's College, Madras.	3 8 0
INTERMEDIATE PHYSICS, by the same author.	4 0 0
LECTURES IN LOGIC, by Rao Bahadur S. Mangesh Rao, B.A.	2 8 0
STUDENT'S HAND-BOOK OF PSYCHOLOGY, by the late Dr. S. Sathianadhan, M.A., LL.D. (2nd Edition)	1 0 0
QUESTIONS AND ANSWERS ON ELEMENTARY LOGIC, by M. Macmillan, M.A.	1 0 0
THE ELEMENTS OF HUMAN PHYSIOLOGY, by G. S. Ramasami Aiyar, B.A.	1 0 0
B.A. EXAMINATION ENGLISH LANGUAGE, LITERATURE AND COMPOSITION PAPERS of 1881 to 1906 (both inclusive)	0 5 0
F.A. MATHEMATICS—ALGEBRA AND TRIGONOMETRY PAPERS, with Solutions and Notes from 1901—1903, by B. Hanumantha Rao, B.A.	0 4 0
MINTO'S LOGIC—INDUCTIVE AND DEDUCTIVE, 5th Impression, Rs. 3-6-0. Reduced to	2 4 0
ROBINSON—SHORT HISTORY OF ROME—Rs. 2-10-0. Shop soiled, reduced to	1 0 0
FAWCETT—MANUAL OF POLITICAL ECONOMY. Rs. 9 0-0. Reduced to	4 0 0

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

The Educational Review

A Monthly Record for India.

VOL. XXVIII.]

NOVEMBER 1922.

[No. II.]

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

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

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

CONVOCATION OF THE LUCKNOW UNIVERSITY.*

GENTLEMEN:

I AM very proud to receive an honorary degree from the Lucknow University with whose establishment I have been so closely concerned and the foundation-stone of which I laid a little more than 18 months ago. I congratulate you on the start that you have made. I appeal to generous subscribers to pay up their donations without delay in order that the University of which they are so justly proud may not be held back in its operations. Thanks very largely to the ability and tact of my old friend, the Vice-Chancellor, Mr. Chakravarthi, you have commenced work without friction, you have got together an accomplished staff and, so far as it is possible within the short period of your existence, you have shown the value of a teaching and residential University. The results of your examinations have given general satisfaction. You have a design for the

University Buildings by an eminent architect, Sir Edwin Lutyens, which will, I think, outshine all University buildings in India. The design is a costly one, but I hope that the funds to carry it out will in time be made available, because it is an unique opportunity for planting on Indian soil a University which in architectural design and, I hope, in all the opportunities of learning will follow and emulate the great Universities of the West. Let your ideal be big and your hopes high, for so you will best serve the coming generation.

The principal work of the University must ever be to teach under-graduates and to maintain high standards of academic culture. But no University in modern times is worthy of the name unless it devotes a considerable portion of its resources in money and in intelligence to the cultivation of research as part of its ordinary functions. In laying the foundation-stone, I expressed the hope that in the Lucknow University you would cultivate the "humanities" including particularly the study of History, Political Science, Economics, and the like.

* Speech delivered by His Excellency Sir Harcourt Butler, K.C.S.I., C.I.E., Governor of the United Provinces of Agra and Oudh, at Lucknow on 30th October 1922.

age. In the fields of mental sciences, such as philosophy, religious thought, literature and study of language, India's contributions to the advancement of learning have been signal and far-reaching. But the basic conceptions on which these noble intellectual structures are built up are very different in the East from what they are in the West. The West derives its inheritance mainly from classical Greek and Roman culture, whereas India derives its inheritance from its own quasi-axiomatic notions of philosophy, of moral conceptions, of social organisation and of its form of literary expression. The full digestion of much in the Western teaching of "humanities" is far more difficult to the average Indian student than is generally assumed.

This is particularly marked in the matter of historical study. One searches almost in vain in the vast and splendid treasure-houses of Sanskrit literature for anything like true historical texts, such as, since the days of Thucydides, have been common and have been collected in the West. This is principally due to the intensity and power of Indian mentality which concentrated itself fixedly upon the essential principles of existence, disdaining as it were the petty and transient changes in material development, or political, or ethnic phenomena. Islam, no doubt, brought to bear upon India the powerful effects of another civilisation, permeated with elements derived from Hellenistic culture. But it still remains true that historical perspective is one of the greatest needs of Indian students to-day. This has been recognised in the parent University of Allahabad to which we all owe so much and from which you have sprung. The "School of Historic Study" in that Univer-

sity of Cambridge, has already achieved important results; and the growth elsewhere of historical societies bears testimony to growing interest in the subject. You, I am glad to say, have already a chair of Indian History and you have recently appointed a Lecturer trained in Epigraphy. The first volume of the Cambridge History of India is a land-mark, but there is a vast field to be explored before India's early history can be fully reconstructed from the monuments, inscriptions and coins which fortunately are still abundant. This work was previously reserved for the small band of Western orientologists to whom must be added some very exceptional Indians like Dr. Rajendra Lal Mitra, Pandit Bhagwan Lal Indraji and that venerable great scholar who has honoured me with his friendship, Sir R. G. Bhandarkar. It has now attracted a number of competent Indian scholars. Conditions therefore are favourable for the extension of historical studies on Western critical lines.

This is a matter which has for many years engaged my attention. Soon after becoming the first Member of the Government of India in charge of the portfolio of Education, I summoned a Conference of Orientalists then in India. One of the proposals of that Conference was to create an Oriental Institute somewhat on the lines of the French Institute at Hanoi or the Russian Institute at Vladivostok. Its object was two-fold, to conserve the ancient learning and also to promote critical research. It was felt there was room for such an institute notwithstanding the splendid achievements of the Archaeological Department under the direction of Sir John Marshall. The proposal was rejected, but I still have a vivid recollection of the character and compass of

antiquities of a country can best be studied and examined by the scholars of that country, and the Universities of India have a grand opportunity before them of fulfilling the functions which elsewhere had been entrusted to Research Institutes. This is not a matter of academic interest alone. Thucydides said long ago, that history was philosophy teaching by examples. It informs and guides Political Science by comparison, analysis and synthesis. No progress can be found and assured which does not rest upon realities in the present and past.

Of political science and economics the importance is obvious in a country which is nearing political and economic majority. Here also you have begun well. Not only have you secured a number of devoted teachers who are enthusiastic on research in this field of work, but you have founded also a Sociological Society which will deal, from a practical point of view with problems of Economics, Anthropology, Ethnology, and Political Science.

This brings me to the question of study of geography in its large aspect. Geography has so far been sadly neglected in Indian Universities. In my first Convocation Speech on behalf of the Government, I presented a chair of Geography to the Allahabad University. It has not been found possible to fill that chair as yet, but I understand that the University seriously contemplates the opening of a school of geography. I earnestly hope that their efforts will be crowned with success. The activity of a man in all ages and places is largely determined by his physical environment. The past of India strikingly illustrates the close relation between geography and history. The varied geographical features which distinguish the different regions and sub-divisions of India account largely for the

role which they have played at varying periods in the political history of India, or in the development of culture and ethnography. Conditions of climate and cultivation, natural lines of communication, density and ethnic character of the population are as necessary for the investigation of industrial development as they are for political growth. Judged by its extent, the variety of its physical conditions, and its independent articulation, India has like Europe a claim to be regarded as a sub-continent of Asia. In the syllabus for your B. A. examination, I am glad to find a special paper devoted to Indian economic conditions—geographical, sociological and political, and that in the study of the subject as a whole, you lay sufficient emphasis on geographical environment. May I hope that some day Lucknow will remove the reproach that rests on British India, that it has no ethnographical museum. Here is a worthy object for the proverbial generosity of the Taluqdars of Oudh.

The systematic study of the great classical languages of India, Sanskrit, Arabic and Persian, is a very fitting subject for study here. The critical methods of the West have still to be applied over an almost unlimited area. The training of competent teachers of these languages on modern lines is a necessary function of the University. No one has a greater respect than I have for the Pandits and Moulvis. I have learnt it from my old friends and teachers, the late Dr. Venis, Sir Denison Ross and that great scholar and explorer, my friend Sir Aurel Stein, to whom I owe more than I can say. The profound traditional learning of the great Pandits and Moulvis is one of the glories of India and the world. Of many branches of classical lore these venerable scholars hold the keys. But their methods require

a lifelong study of the subjects of the most intensive kind and are unsuited to any general scheme of education, which must include other subjects, and so limit the time available for instruction, in the classical languages. Both Sanskrit and Arabic grammar with their logical clearness and richness of inflection provide excellent exercise for the mental training of the young mind, but only if the constructive principles of word formation are visualised, as it were, with the help of suitably arranged books. The traditional teaching of Sanskrit grammar, as compressed with wonderful precision in the quasi-algebraic formulae of that great codifier of Indian linguistic science, Panini, cannot meet these requirements. In our Secondary schools teachers are needed who with a thorough mastery of the structure of the classical languages combine that wider outlook as regards the educational purpose of language and its literature which only philological training on modern and Western lines can give. I am gratified to find that in selecting teachers of Oriental languages, you have endeavoured to secure scholars who combine intensive study of the Oriental type with Western training according to modern methods.

I claim, gentlemen, that English has now become the classical language of India. Two different aims must be clearly distinguished in the University teaching of English. One is the study on true philological lines of the language and of the literature, which it enshrines, with a view to enabling students to comprehend the intellectual past of the nation, which has brought India into closer connection with the West than ever before. The other is to provide Indian students, whatever their mother-tongue, with as complete a command of English in speech and written

expression of thought, as is needed by those who intend to take their share in the civic life of the country, which as a constituent part of the British Empire must adopt English for the principal language of administration and public intercourse. The lines on which the latter aim can best be attained have been fully indicated in the Report of the Calcutta University Commission, and to follow them up is likely to become more and more easy with the spread and improvement of secondary education. Many of its recognised defects so far may with full justice be attributed to the very serious difficulty felt wherever instruction has to be conveyed through a language medium foreign to the vast majority of both teachers and students. But in the face of this difficulty some comfort may be derived from the fact that as far back as our historical information goes, the administrative and intellectual work of India has for the most part, if not always, been carried on either in a language confined to the learned, like Sanskrit, or else in a foreign tongue like Persian. Neither the use of what in most respects has been a dead language for many centuries before the Muhammadan conquest, nor the subsequent predominance of Persian, has prevented India's intellectual individuality from asserting itself throughout those ages. Is it too much to hope that Indian individuality will maintain its vitality, notwithstanding the advances of the English language, to the great advantage of India and of human civilisation as a whole?

As Chancellor, it is my duty and privilege to offer the students advice. The difficulty of advising another generation is always present to me, although I am a student still. Each generation thinks that it is wiser and better than the generation that preceded it. And it is

right, for in this way, progress lies. The awakening of India has come. Great seismic movements are at work and you may find yourselves carried along by forces that you can neither discover nor direct. But one thing you can do—You can stick to reality—You can keep the issues clear. British ideas of freedom have made you what you are. Universities are the power-houses of freedom. The British have fearlessly given to India the boldest scheme of education in history. The fruits of that education are apparent to-day in some difficulties and much progress. Of late there has been a movement, which seeks to discredit progress on Western lines, to decry Western civilisation, a movement which is clearly and inevitably heading for reaction. The forces of reaction are always persistent and re-

sourceful in this ancient land of Hindustan. Do not make a mistake. The freedom which you cherish is a Western product. Sooner than you think you may have to choose between reaction and progress. I can only pray that your choice may redound to the happiness and prosperity of India. This is my message to all the younger men who are shortly going out into the world. Stick to reality. Always connect words with things. Keep the issues clear. Remember that it is not really possible for the same thing to be and not to be. It only remains for me to say that I shall ever keep this day in grateful remembrance, and that I shall carry away with me great pride in the degree that you have bestowed upon me, and a strong abiding hope and faith in the future of the University.

Third Edition (1922)—Price Re. 1-12-0.

A COURSE OF GENERAL MATHEMATICS FOR HIGH SCHOOLS

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

Crown 8vo. 400 pages with over 195 diagrams

By V. RAGHUNATHA AIYAR, B.A., L.T.

Assistant, Teachers' College, Saidapet.

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

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

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

THE TEACHER.

In halls of learning have I toiled these years
 And hourly sought to draw the youthful mind
 To love of knowledge, urging it to find
 The highest joy in books. No haunting fears
 Of fruitless work have chill'd my soul, and sneers
 Have not becalmed my endeavours; no kind
 Of wavering faith, I trust, will ever blind
 Me to the bliss that in this task appears.

But then, what guerdon do I seek for all
 This work? If *once*, some pupil, toiling hard
 Will find the rapture of a Master's word,
 And pausing gratefully my name recall,
 Tracing his joy, in part, to what he heard
 And learnt from me—it will be rich reward.

BENARES, }
 8th Nov., 1922.

P. SESHADRI

THE MADRAS UNIVERSITY BILL
A CRITICISM

BY MR. S. K. YAGNANARAYANA AIYAR, M.A.

I

ONE of the most important topics that have been engaging the attention of the Madras public for over three months has been the new Bill regarding the re-organisation of the Madras University which the Education Minister has introduced at the current session of our Legislative Council. The enlightened public of this Presidency has made full use of the Press and the Platform to ventilate its views on the Bill. The Bill has its enthusiastic admirers but people are not wanting who condemn it wholesale. An attempt will be made in this short article to set forth the main features of the Bill and its chief merits and defects as pointed out by its advocates and detractors.

It is eighteen years since the Act VIII of 1904 was passed by Lord Curzon. Much has happened in the broad world outside since 1904 and India has not escaped the influence of those mighty events. A reorganisation of the educational machinery of the country with a view to make it more up-to-date and efficient is felt to be long overdue and the popular Minister now in charge of the Education Portfolio in this province has set about the task in right earnest. Elementary and Secondary education have been or are about to be thoroughly modified and he has published this Bill so that the University, the keystone of the educational structure, may also be rendered up-to-date.

The Bill proposes to convert the Madras University into a teaching and residential University with a territorial jurisdiction extending over ten miles around the Fort of St. George. This transition is to be brought about in course of time and till then the University will have an external side as it were which will concern itself with the existing colleges of the mofussil, to be called according to the Bill "affiliated" colleges, as contrasted

with the "constituent" colleges of the City of Madras and its immediate neighbourhood. The existing institutions of the University are transformed into new ones with new names and as recommended by the Sadler Commission and in conformity with the practice obtaining in all the recently started Universities of Upper India—Dacca, Lucknow, Patna and Benares, for example—we are to have a Court, an Executive Council, an Academic Council, etc. Above all, we are to have a full-time paid Vice-Chancellor.

The merits of the new Bill which are sung aloud by the advocates of the measure are many. First the present system of the University being that of a soulless machine for ploughing so many thousands of students every year, for perpetrating "the massacre of the innocents," as it is called, goes once for all, as it deserves to go, and the University assumes its proper function of teaching, of disseminating useful knowledge and becoming a centre of culture, an assembly of the learned.

Secondly, the Senate gets thoroughly remedied and is rendered more democratic. The University is thus brought into wider touch with the surging national life around instead of leading an absolutely isolated life of its own as it has been doing hitherto. The Legislative Council, the Corporation of Madras, the Chambers of Commerce, Indian and European, all send their representatives to the Court and this flow of new blood in its veins is bound to stir the University into healthy activity.

Thirdly, the merchant princes and landed magnates are given an opportunity to bless themselves and the University by giving substantial donations which will, according to the amount of the gift, entitle them to come to the Court direct or send their representatives to that august body. This brings us the much needed money and draws us closer to the monied classes who have hitherto been given no opportunity to evince their interest in University education.

[Note.—The aim of this article and others to follow on the same subject will be to make a careful study of the University Bill in the various stages of its development. No attempt will be made to 'criticise' the Bill exclusively from any particular view-point only. All aspects of the question will be considered and an impartial study attempted. This article deals with the original Draft Bill and it will be followed by another on the Bill introduced in the Legislative Council and later on, if the Bill be passed, by a third upon the Bill as passed.—S.K.V.]

The bringing into existence of two bodies like the Executive Council and the Academic Council, the former to be in charge of administrative matters in general and the latter of the cultural side, with the Court to exercise a general supervision, is, it is claimed, a more satisfactory arrangement than the existing one where the Senate and its Syndics are called upon to do multifarious and at times incongruous functions.

The appointment of a full-time and salaried Vice-Chancellor, costly luxury as it may seem at first, is bound to justify itself as we would then have an officer who may be expected to keep the University quite abreast of the times, and if anything goes wrong we at least have one person to fix the responsibility upon. Though in the past the Indian Universities have been exceptionally fortunate in having been able to secure the services of eminent persons who as Honorary Vice-Chancellors gave in an unstinted manner the best in them, yet it is felt we have come in the history of our Universities to a state when we can no longer be content with part-time Vice-Chancellors, and if they are whole-time officers it is too much to expect them to work without pay.

The multiplicity of institutions and their new names need not be felt as a grievance, as these are terms now current in all modern and up-to-date Universities of the West and there is some advantage in the uniformity of names, as otherwise every time an institution of a sister University is mentioned we have to refer to our table of exchange and find out what our corresponding institution is.

Thus it is claimed that the new Bill if passed will rejuvenate our University by making it smaller and more manageable, a real centre of light and culture, an institution in which all the citizens will have a share and of which they may legitimately be proud, a real teaching, residential, civic University.

Let us turn to the other side of the picture. The Bill has been condemned section by section and as a whole, and without going into details let us enumerate some of the chief defects pointed out.

First the question is asked, quite rightly as I should think, whether there is any necessity at all for a new measure. Does not the existing Act give us facilities for bringing about the desirable changes to our heart's content? Section 3 of Act VIII of 1904 contemplates the converting of the existing Universities into teaching institutions, and if that radical change has not been brought about the real cause is the eternal want of funds. Given the necessary amount of money even now new chairs can be founded and facilities given for higher studies and research.

Then it is feared that the measure treats the Madras Colleges with special favouritism, and the mofussil colleges which now teach over sixty per cent. of the University candidates are given a step-motherly treatment. People of the mofussil apprehend that even if new Universities are started, say, one in the Andhra province and another in the Tamil districts, they may not be so liberally financed as the University at Madras, with the result that their efficiency will suffer and the market value of their products, to take a commercial view of things, will not be as high as that of a Madras graduate. It is this attitude of suspicion of the mofussil members that was mainly responsible for the Senate shelving the question at its last meeting (12th August).

The Bill further gives no idea as to how the various Madras Colleges are to be converted into constituent colleges of the University. The Government of Madras, Missionaries, the Trustees of the Pacha'yappa's—these are responsible for the management of the various arts and professional colleges now situate within the territorial jurisdiction of the new University, and whether it will take up all these colleges and run them, or whether the existing managements will be allowed to have practical autonomy in all internal matters, the University exercising only a general control over them, or whether a new Board will be brought into existence consisting of the representatives of the University and of the various existing managing bodies, these are questions left conveniently vague

and those who know the principles underlying and actuating the work of some of these foundations will be able to realise the immense difficulty that is likely to be experienced in throwing open their portals to all without any distinction of caste, creed or colour, or in not making attendance at religious classes compulsory as contemplated in Section 6 of the Bill.

It is further contended that the new Bill by making the Intermediate as its entrance examination will eventually reduce all the existing second-grade colleges into glorified high schools. These second-grade colleges of this Presidency have been discharging a very useful function in taking the benefits of University education to the very door of many a poor village boy. If the University gives up its Intermediate as it did give up its Matriculation, perhaps a new Intermediate and Secondary Board will step in its place and whatever be the nature of the future management, the colleges will lose their prestige and become bigger schools.

The Chancellor, it is urged, is given more power in the Bill than he has even now and this will go against the real independence of the University which is so necessary for its growth and efficiency. The Governor does not preside over the deliberations of the Legislative Council of his province lest the freedom of discussion be curtailed. Why should the Chancellor of the University, who is the same Governor, have the power, it is asked, as contemplated in Section 9 (i), to preside over the Court whenever present and thus curb the freedom of discussion of the Court?

Shrewd critics have been able to see in Section 32 which empowers the Court to withdraw any degree from a person who "has been guilty of scandalous conduct" a powerful weapon put into the hands of the Court which is likely to be abused, especially in these days when feelings caused by differences of political opinion run high and the party in power may put their own interpretation as to what constitutes scandalous conduct.

On cultural grounds objection has been taken to the right given to plutocrats to have a seat in the Court or to return their representatives thereto as contemplated in Section 13 of the Bill. Money is good and we want more and more of it.

but to give a man a seat in the Court, the supreme body of the University, for no other qualification than his gift of money to the University, is taking, it is urged, a rather low view of the dignity of the University. These merchant princes and businessmen will clamour for tangible results and quick returns and they will create an atmosphere not quite congenial to the undisturbed pursuit of knowledge and higher research work, which should go on indifferent to cost or result. The learned professions have not been given due recognition, while the Chambers of Commerce are asked to send their representatives to the Court. Why not such Associations as the Madras Teachers' Guild, the High Court Vakils' Association and any recognised Association of medical men be also empowered to send their representatives?

Lastly, it is asked, has any estimate been made of the additional expenditure involved by the change, recurring and non-recurring, and has any light been thrown on the possible source of this extra money? The Allahabad University, it is understood, has effected more or less the same changes in its constitution as contemplated in the Madras Bill and they have set apart seven lakhs a year to meet the extra expenditure. How many lakhs would this measure cost us and where is the money to come from, even supposing that the best method of spending those extra lakhs is to spend them on the University?

Enough has been said above to show that the Bill is not perfect as it is. It is drawn up with the best of intentions. It is highly necessary that there should be periodical stock-taking and shifting of things and nobody would deny that our University does require a change; but whether the changes contemplated in the Bill are the real changes felt to be necessary or not, that is the question to be decided.

The Senate has practically thrown the Bill overboard. There is so much of difference of opinion about the Bill in the country. It may not therefore be wise to rush the Bill through the Legislative Council at its next session. The public should be given more time to discuss the Bill in all its aspects and no party action should be taken in a matter like this which is of far-reaching consequences.

THE BEGINNINGS OF ENGLISH EDUCATION IN MADRAS.

IN the year 1822, Sir Thomas Munro, the then Governor of Madras, distressed at the rapid decay of literature and the arts which he saw going on around him, instituted an inquiry into the state of indigenous education in the Presidency. He felt that it was one of the chief duties of the East India Company to carry out the wishes of Parliament by providing for the "moral and intellectual amelioration of the people." The results of his inquiries were not made known till 1826. The Board of Revenue to whom the inquiry was entrusted ascertained that there existed 12,498 schools for a population of over 12 millions; and Munro congratulated himself that the state of education, low as it was compared with the state of education in England, was higher than it was in most European countries at no distant times. The lower classes of the population were entirely uninstructed—"the middle ranks including the landholding and trading classes, received a scanty and, in the case of the Hindus, a strictly commercial training. Every Brahmin was able to read and write and there was a considerable body of men of this class, who had partaken of what might be styled a liberal education, while not a few had further obtained considerable eminence in such special studies as grammar, logic, rhetoric, metaphysics and mathematics. It is true that in physical and mathematical sciences their knowledge was infinitely inferior to that current in Europe at that date. It is true that in these branches real progress had ceased for centuries. But what was taught was well-taught and the attainments of the

Hindus were not inferior to those of any ancient nation or to those of European scholars prior to the Renaissance." (F. W. Thomas: *The History and Prospects of British Education in India*, p. 15.)

But long before Sir Thomas Munro's Governorship, in fact as early as 1706, the Danish Missionaries, Ziegenbalg and Plutschow had settled at Tranquebar and begun teaching to native children. It is this Danish Mission that produced great scholars and men like Schulze and Schwartz. The schools of the Danish Mission contained as many as 400 pupils about 1746; but half-a-century later their strength sank down to 100. The greatest services of this Mission were the translation of the New and Old Testaments in Tamil and the setting up of the first printing press in the land. In 1801 Tranquebar fell into English hands; and the schools of the Danish Mission continued to be fostered for some time more by the Church Missionary Society and the Society for Promoting Christian Knowledge. In 1815 these schools were 23 in number and contained nearly 700 scholars of whom at least 150 were taught English.

The history of this Danish Mission is important because it was the pioneer Missionary society to apply itself to education and also because its Missionary teachers came so early in contact with almost all the fundamental questions which have since excited discussion in connection with education in India. They had to face the question of religious education, the problem of the choice of the language to be employed, and the production of a vernacular literature. The question of the medium of instruction was never difficult of solution; the first act of the

Missionaries was to learn the vernacular and teach it to the children. So long as the Portuguese tongue was to any extent current in Tranquebar, that was also employed; and with the growth of the British power, English took the place of Portuguese. "English of course was not imparted indiscriminately to children who would never find any use for it; but in the seminaries and normal classes it was adopted as the most convenient means of giving access to the stores of European knowledge." With the aid of the printing presses (the first established at Tranquebar in 1710 and the second at Vepery in 1761) they translated the Bible into Tamil and Telugu; they compiled a Tamil Dictionary and provided numerous small text-books for their schools.

The first English Mission was started at Madras in 1727 under the auspices of the Christian Knowledge Society which adopted as it were the Danish Missionary Schulze. Thenceforward, with help from Tranquebar and occasionally from Germany, the Society maintained a Missionary staff and established stations at Tanjore, Trichinopoly, Palamcotta and Cuddalore. It had the rare good fortune to secure the services of Christian Frederick Schwartz, the great Missionary who "presented an example of Christian rectitude and inspired Native princes and European functionaries with an equal measure of admiration and respect." Schwartz was the chief instrument of the Society in establishing schools and laboured for nearly half-a-century as the greatest pioneer of Missionary education and enterprise in the peninsula. And when he died in 1798 full of years and honours, "our two greatest sculptors, Bacon

and Flaxman carved the image of the holy man in marble, the one for the East India Company to be erected in the principal church at Madras, the other for the Tanjore Raja to be placed in the Mission church, where daily the young Raja visited the monument and delighted to point to it, exclaiming 'There is the image of my father.' " (Kaye: *Christianity in India*, pp. 82 and 83.)

In 1804, the London Missionary Society began to plant settlements at Vizagapatam, Bellary and other places, and the Church Missionary Society and the Wesleyan Society soon followed. But none of the Missionary activities in Madras came up to the height of the work of the Baptist Mission of Serampur which worked under Carey, Ward and Marshman and was able to provide a number of schools of higher grade. Missionary educational enterprise in Madras, elementary and precarious as it was, and frequently thwarted by the fears of the natives and the prejudices of Government, still served as the nucleus of a now widely prevalent system of education; and moreover it served as a goad to instil into the mind of Government a consciousness of their duty to the people in the field of education. The first project for native education which can in any way be ascribed to Government was that of Mr. Sullivan, then Resident at Tanjore, who in 1784 brought forward a scheme for setting up English schools for the higher classes; and it is as a partial fruit of this scheme that Schwartz was enabled to start some of his schools. In 1787 the Directors sanctioned a small annual grant for the maintenance of such schools where a course of teaching was fol-

lowed which included English, Accounts, Writing, Tamil, Hindustani and some Christian instruction. But from the time of Warren Hastings down to the year of Lord Macaulay's famous Minute of 1805, the settled object of Government was the *promotion of Orientalism* pursued with the double purpose of "arresting the decay of Oriental learning, and of encouraging cordial feeling between the English and their subjects." When the Company's Charter was renewed in 1793, Grant and Wilberforce endeavoured, but without success, to introduce an Education clause in the renewed Charter. Twenty years later when the Charter again came up for renewal before Parliament, the *Clapham Set* was victorious and they secured the inclusion of the following regulation in the Charter of 1813:—

"That a sum of not less than one lakh of rupees each year be set apart and applied to the founding and maintenance of colleges, schools, public lectures and other institutions for the revival and improvement of literature and encouragement of learned natives of India and for the introduction and promotion of a knowledge of the sciences among the inhabitants of the British territories of India."

Thus as Mr. E. W. Thomas has well expressed it, "the Directors were not a little embarrassed as to the disposal of the £10,000 a year with which, contrary to their wish, they suddenly found themselves presented from their own revenues." In 1814, they issued a Despatch to the Governor-General proposing to spend the new allotment not in new colleges, but in improving those already in existence like the Calcutta Madrasah and the Benares Sanskrit College,

to concentrate their educational efforts in some particular city, to confer marks of distinction on natives and to inspire their civil servants with a desire to study Sanskrit. But until 1823, no serious attempts were made to utilise the grant in Bengal and it was only in the last-mentioned year that a *Committee of Public Instruction* was formed with authority over all the educational institutions maintained by Government.

It may be remembered that it was about this time that Sir Thomas Munro in Madras propounded his scheme according to which there were to be established in each Collectorate (1) a higher Hindu and a higher Muhammadan school; and (2) 15 inferior schools being on the average one to each Tahsil. For the twenty Collectorates of which the Presidency was then composed there were to be 40 Collectorate or High Schools and 300 inferior or Tahsil Schools. Sir Thomas Munro proposed to maintain these schools at a trifling cost of about Rs. 50,000 a year; and the scheme of studies in the Collectorate schools was to include English, Tamil and Telugu, Grammar, Arithmetic, Geography and a little of Arabic and Sanskrit, in cases; and the scheme was to provide education for about 7,000 children, or a total average of about 20 to each school. But very little of the project was ever carried out. A Committee of Public Instruction was formed in 1826 on the model of that of Bengal and it began its work with a great flourish of trumpets. It started a Normal School at the Presidency town in which Hindu students should study Tamil and Sanskrit and Muhammadans should study Hindustani, Persian and Arabic, physical science being added in both cases. But the school was not popular, its strength was very low, and the eight schools which the

Committee opened in the Presidency District were equally weak and unpopular. It was supposed that Macaulay's famous Minute and Lord William Bentinck's Proclamation based on that Minute prevented the proper and enthusiastic carrying out of Munro's ideals. In 1835 the Government of Madras proposed in consonance with the newly-declared policy of the Governor-General that they would open four English schools, a normal class and a college; and they thought that Bentinck's Proclamation prohibited the use of the vernacular languages as the media of instruction in Government institutions. The Supreme Government of Calcutta sanctioned the withdrawal of aid from the previous Collectorate and Tahsil schools, the establishment of an English college at Madras and the starting of English schools at important places. Munro's schools were therefore abolished and the Committee of Public Instruction was now replaced by a new Committee known as the Committee of Native Education presided over by a Member of Council. This new Committee submitted a comprehensive scheme for the immediate establishment of four English schools and also a normal school and a college at Madras. No notice was taken by Government of these proposed measures until Lord Elphinstone issued his famous Minute in December 1839, which is printed in *extenso* in the Second Part of *Selections from Educational Records, 1840—1859*, edited by Mr. J. A. Richey, Educational Commissioner with the Government of India, and published by the Bureau of Education, India (1922) in continuation of the First Part edited by Mr. Sharp.

Lord Elphinstone proposed in his Minute: (1) the establishment at Madras of a Collegiate Institution or University having a curriculum including literature, philosophy and

science, and (2) a High School which was to be a department of the University and to which only boys able to read and write English intelligibly are to be admitted. The High School was to teach English literature, vernacular languages and elementary science and philosophy. The High School was opened in April 1841, with nearly 70 boys on its rolls, though the College was not fully organised until 1853. The highest classes of the High School were soon receiving a thorough English education. For the improvement of education in the Province, Lord Elphinstone proposed to establish superior English schools at a few mofussil centres with the hope that they might ultimately develop into colleges. And in order to carry out his scheme, he superseded the short-lived Committee of Native Education by a University Board (1841) which was eclipsed for a few years (1845-47) by a Council of Education and finally gave way to the Council in 1848. Nor was the Council itself destined to flourish for long. It was replaced by a Board of Governors in 1851; and three years later all educational activities came to be vested in the Department of Public Instruction newly created.

The University Board of Lord Elphinstone was presided over by Mr. George Norton, then Advocate-General, who did so much for the cause of education in the Presidency. The Court of Directors communicated their general approval of the scheme of the Governor, though they expressed a mild wish that they were unwilling to forego any measures calculated to encourage the previous Collectorate and Tahsil schools. In a subsequent Despatch dated September 1842, they sanctioned the opening of four provincial schools together with the rules for their

management by local committees. But the schools were not opened as it was found impossible to secure any competent headmaster on the pay sanctioned. In the next year the President of the University Board drew the attention of the Government to the unsatisfactory condition of the Madras High School, and urged the necessity of opening collegiate classes, one of Medicine and another of Engineering with a view to extending the scope of the institution. He also recommended that the Provincial Schools be manned by headmasters recruited from England preferably and that in order to encourage the educational institutions, an educational test for all candidates for Government service be introduced.

The Marquis of Tweeddale, the then Governor, took the opportunity to review the condition of education in Madras in a lengthy Minute, dated August 1843, with which however some Members of his Council did not concur; and as the proposals of the University Board involved considerable expenditure they were referred for disposal to the Court of Directors who rejected them as the following extracts from their Despatch of August 1844 will show:—

"At Bombay and in Bengal the continued promotion of education through a number of years has reared and is rearing at the Presidencies, a class of schoolmasters who can safely and profitably be sent into the provinces. The want of such a nursery in Madras has been felt the moment that schoolmasters are applied for; but it is there only that fit masters for Madras Province can be provided. We therefore think it will be better to delay the formation of the Provincial schools until competent teachers can be procured at Madras..... We very much doubt

the expediency of applying either to England or to Bengal for masters who are to lay the foundation of village schools under the Presidency of Fort St. George..... It is manifestly premature to found colleges for scientific and professional objects or to establish tests for public employment, while the means which are provided for the indispensable preliminary instruction are so imperfect and so little resorted to by those for whose benefits they are intended. We must repeat our injunctions to you to direct the Governors (of the University Board) to confine their attention to the fuller development of the establishments over which they already preside."

The University Board continued to press for the sanction of their scheme with the consequence that in their letter dated 8th October 1845, the Directors vetoed the whole project of provincial schools and added that "the further development of the branch of the University now established should be their exclusive object of attention."

Sir Henry Hardinge, the Governor-General, had meanwhile issued a resolution dated 10th October 1844, the object of which was to throw open the public service to qualified young men from the various educational institutions under Government and other bodies. The heads of departments were instructed "to omit no opportunity of providing for and advancing the candidates thus presented to their notice, and in filling up every situation of whatever grade in their gift to shew them an invariable preference over others not possessed of superior qualifications. With a view still further to promote the diffusion of knowledge among the humbler classes of the people, the Governor-General is also pleased to direct that even in the

selection of persons to fill the lowest offices under the Government, respect be had to the relative acquirements of the candidates and that in every instance a man who can read and write be preferred to one who cannot."

Consequent upon this important resolution of the Supreme Government, the Madras Government invited the University Board to submit proposals to give effect to this principle. The views of the Board conflicting with those of Government, a new Education Board called the Council of Education was created to organise and conduct the examinations for entry into public service and it also got transferred to it some powers of the University Board. This Council proposed the establishment of 9 Provincial Schools and suggested the inclusion of a Bible course in the curriculum of their studies. The Directors disapproved of the Council saying "so complex a machinery is more likely to embarrass than advance the progress of education" and suggested the strengthening of the University Board with an enlargement of their sphere of operations. In that Despatch the Directors recommended the dissolution of the Council and also communicated their views on Hardinge's resolution. The University Board which was thus resuscitated, had been, ever since its inception, involved in frequent controversies with the Government "to whose proceedings and want of support it ascribed the ill-success of the only institution under its charge."

The University Board was even now not to enjoy an undisturbed tenure of office. Sir Henry Pottinger, the new Governor who succeeded in 1848, proposed the appointment of a new Council of Education of some 20 members including the members of the University Board with a Member of Council

as President. There was much diversity of opinion between the Board and the Council, as to the soundness of the educational policy of Government in providing a liberal education for the higher classes to the neglect of the elementary education of the masses. At last in 1851, the Governor Sir Henry Pottinger issued an exhaustive Minute reviewing the state of education in the Presidency and stating his opinions on the questions under discussion. He proposed the establishment of a normal school at the Presidency exclusively for the bringing up of well-qualified schoolmasters to be employed in the Provincial and other seminaries. What is more remarkable and of peculiar interest at the present time is that he recorded as follows (in his Minute of 6th June 1851):—

"I myself esteem a critical acquisition of the latter (the vernacular language or dialect) to be a *sine qua non* to their (schoolmasters') efficiency, and my earnest advice would be that no man should be entrusted with the superintendence and charge of a Provincial School, until he had proved by test and examination that he will be completely able to teach others in the language of the province to which he is to be sent..... My belief is that an education solely attained through English, instead of fitting a native of India for general worldly intercourse with his fellow-men or being likely to render him a good and valuable member of the community and an efficient servant of the State, should his fortune lead to his being so employed, has directly a reverse tendency. I would therefore so far as it rested with me invariably give the preference, as regards the selection of candidates for Government employ, to men well-versed in the vernacular beyond those who were wanting in that vital

acquirement, though greater proficient in English; but a happy combination of both is obviously highly desirable; and my earnest trust is that when the Provincial Schools are once fairly established and the people have learned to appreciate the benefits of those institutions, they will amply realise that desideratum in the scholars attending them."

Besides this important pronouncement Sir Henry recommended the adoption of a regular system of Grants-in-Aid to schools under private management and the postponement of the opening of the collegiate department of the University "until the advancement of scholars might be considered to justify it." Mr. Thomas, one of the Members of the Governor's Council, in a separate minute advocated the thorough education of the people in the vernacular tongues, a judicious and hearty encouragement of private institutions and the formation of an agency for the preparation of elementary books for the use of schools and for their inspection. Another Member of Council, Mr. Elliott, laid stress on the necessity of providing good schoolmasters, of giving aid to well-conducted private institutions and of preparing elementary text-books for the use of schools. He also suggested that in creating Government schools care should be taken not to place them in opposition to, or in rivalry with, other existing institutions.

Sir Henry Pottinger was finally forced to fall back upon the University Board which he reorganised in April 1852, by the addition of 13 new members. The reconstituted University Board began well by submitting comprehensive proposals for the extension of education. It recommended that one primary school be started at the Presidency town and four others in Malabar, Bellary, Tanjore and

Masulipatam. It would also recommend the starting of one or more Provincial High Schools in any of the above Collectorates in which a sufficient number of scholars might be found fit to enter upon a High School course. In the primary schools attention should be mainly directed to the eventual acquisition of a thorough grammatical knowledge of one vernacular and in the High Schools pupils should be directed to the critical and philological cultivation of these languages with the special object of making them competent teachers, translators and original authors in the vernaculars. The Board were also in favour of a comprehensive scale of Grants-in-Aid to all permanent and prosperous institutions without distinction as to their religious discipline or tenets. These proposals of the University Board led, in the words of Mr. Richey, to "the usual voluminous noting by the Governor, the Members of Council and the Board, during the course of which the President of the Board (Mr. George Norton) and five of the old members resigned." It was in 1853 that the first Government school outside the Presidency town was founded at Cuddalore, and a second school was opened two years later at Rajahmundry.

In February 1853, Government sanctioned the immediate creation of a Collegiate department in the University (i.e., the High School). Soon afterwards the Department of Public Instruction was created to which the functions of the previous Boards were handed over. A review of the state of education in 1854 does not give us a bright picture of the situation. The High School at Madras remained where it was except that the fees were lowered. The College department was not popular at the beginning containing only

28 students. There were a number of primary schools with about 300 pupils and a Provincial High school or two. There were also such insignificant establishments as a Female Orphan Asylum and a Charity School at Anjengo. This scanty enumeration completes the list of State institutions at this epoch; and a paltry sum of £8,000 was spent annually on these. But private efforts had also begun to grow. There was the Pachaiyappa's Central Institution opened as a primary school in 1842 which offered an almost gratuitous education in the elementary branches of English literature and science coupled with instruction in Telugu and Tamil; and there was also the Free Church Institution started in 1837 by John Andersen and his two colleagues, Johnston and Braidwood. The Church Missionary Society was specially active in Tinnevely. And there were, according to a trustworthy computation, as many as 30,000 children in Missionary schools in the Madras territories; and of these 3,000 were learning English and were receiving a sort of secondary education.

The creation of the Department of Public Instruction necessitated the appointment of a Director of Public Instruction, though the Madras Governor was for a Secretary for the Education Department on a par with the Secretaries of the Judicial and Revenue Departments; and Sir A. J. Arbuthnot was the first Director; he rose to be afterwards acting Governor of Madras, and Member of the Supreme Council as well as Vice-Chancellor of the Madras and Calcutta Universities and was the author of *Selections from the Minutes of Sir Thomas Munro, Life of Lord Clive* and a number of articles in the *Dictionary of National Biography*.

The first important notification of the new

Department was that of revised rules for regulating Grants-in-Aid of approved private schools and other institutions and was dated 26th August, 1856. Grants-in-Aid were only to extend and improve secular education and to be given only to recognised schools with an assurance of permanence. Such schools and their registers and accounts ought to be inspected by a Government Inspector; while except in the case of Normal and Female schools aid would be given only to those schools in which a monthly schooling fee is required and is paid by not less than four-fifths of the pupils. Grants would be given for special purposes such as provision of furniture, school-books, maps, etc., erection or purchase or enlargement of school buildings, the augmentation of the salaries of teachers, the provision of stipends for pupil-teachers and of gratuities to their instructors. Grants-in-Aid of the salaries of teachers would be made only in the case of duly certified teachers; the certificates to be awarded to schoolmasters were of nine grades entitling the holders to a graded scale of grants. Grants were to be made to industrial schools also. Grants were first sanctioned for the year 1856-57.

Soon afterwards the University of Madras was incorporated by Act No. XXVII of 1857 of the Legislative Council of India.

In 1859, consequent upon the receipt of the Educational Despatch of Lord Stanley, the Director reported upon the advisability of imposing an educational rate as a means of providing for the primary education of the rural population and of giving Grants-in-Aid to Missionary institutions which were objected to by some sections of native opinion. The Director recorded it to be his opinion that the levying of a rate was necessary and might

be tried in one or two localities and that there was no real objection on the part of the people of the country to grants to Missionary institutions.

With this we may close our survey of the beginnings of Western education in our Presidency. The subsequent growth of higher education controlled by the University and of Secondary and Primary education controlled by the Department may be left for description on a future occasion. As Mr. Richey well remarks, down to the decade 1855-1860, the policy of the Madras Government was frequently fluctuating; while the personnel of the Boards to whom was entrusted the control of education was equally changing. Hence it is no matter of surprise that "the educational activities of the Madras Government were not fruitful in results" or that we find in 1852 but one single institution in the Presidency founded or under the immediate control of Government.

C. S. SRINIVASACHARI.

TALISMANS AND CHARMS

For those People to Avoid all Sorts of Misfortunes and Enter the Gates of Successful Life.

	RS.	AS.
For Honour, Riches, Learning and Greatness	...	7-8
For Health, Physical Strength, &c.	...	7-0
For Power of Eloquence, Speeches, &c.	...	7-8
For Success in any Undertaking or Litigation, &c.	...	10-8
For Success in Sport, Racing, Cards, Games of Chance, &c.	...	7-8
For Success in Trade, and Business	...	10-0
For Men's Love to Women	...	7-8
For Women's Love to Men	...	10-0
For Love of Opposite Sex, attractive power	...	7-8
For Agricultural Prosperity, Farming, Good Crops, &c.	...	7-8
For Success in Mining Plumbago, &c.	...	100-0
Rabbi Solomon's Special Talisman for every success. Specially valued and worn by every successful Hebrew, 2nd quality	...	21-0
1st quality	...	30-0

NOTE.—A Money Order will bring the Talisman to your door. Always the full amount should be paid in advance. No V. P. P.

Extensive Life Readings ... Rs. 15.

D. A. RAM DUTH,

ASTROLOGER,

No. 30, (E.R.) Cheku Street,
COLOMBO (CEYLON.)

DISCIPLINE: STANDARDS AND METHODS.

"Let the history of your domestic rule typify, in little the history of your political rule; at the outset autocratic control, where control is really needful; by and by an incipient constitutionalism in which the liberty of the subject gains some express recognition; successive recognition of this liberty of the subject gradually ending in parental abdication."—H. SPENCER.

ORDER is the first law of Heaven; and discipline is the first condition of success in all departments of life both for individuals as well as for groups of individuals. A man who has no control over his impulses, whose passions are not obedient to his higher reason, cannot attain what he desires. An army that is not obedient to its general can easily be routed by a smaller but well-disciplined body of soldiers. The success of the Western nations over the Eastern is, among other causes, greatly due to the superior discipline of the European armies. In teaching, discipline plays a very important part. However skilful a teacher may be and however intelligent his pupils, unless there is discipline in the class the whole teaching effort is bound to be wasted. Very many otherwise good teachers have failed in their vocation on account of their lack of the power of discipline. "A mob of boys," says Edward Thring, "cannot be educated."

Important as discipline is, we should try to know as exactly as possible, what it consists in. Mr. Vacha, in his *School Organisation* says: "It (discipline) expresses itself in the form of orderliness and good conduct." "The results of good discipline," says Mr. Wren, "are good order, good habits, good work, and good training; obedience, diligence and self-respect; love of lawfulness and success." "Obedience," says another educationist, "is the root of discipline." Obedience and orderliness, then, are

the most important factors of discipline. But this is not all. Discipline has a more positive side also. It does not consist only in not interrupting, but it implies positively attending, with enthusiasm, to what is told by the teacher. In a well-disciplined class not only is there no disturbance, but there is positively mutual stimulation of the boys by the master and of the master by the boys, and a pleasant relationship between the teacher and the taught, and "the air is full of serious moral purpose."

One more point to be remembered in connection with discipline is that it like all other virtues is a mean between two extremes. A good disciplinarian should avoid on the one hand "the German-drill-sergeant system of painful rigidity" and on the other hand any careless and slipshod system of class discipline. The former crushes spontaneity and activity, the latter leads to moral looseness and flabbiness.

Having thus got at a general description of discipline, it is next to be considered whether we should expect the same standard condition of orderliness and obedience to exist in every individual and every group of individuals to be able to call them well-disciplined. Such an expectation, though at first it appears reasonable, will on reflection prove to be not quite sound. In judging of all desirable things of life we recognise differences of degree and variations from the standard as quite legitimate. In judging of the progress of an individual towards health we take into consideration his age, his constitution, his parentage, and the conditions under which he lives. And after making allowance for all these, we call different individuals in different states of body "healthy" even though they do not come up to our general standard of healthi-

ness. Similarly we call individuals of different ages "strong" though objectively they are not able to produce the same physical results. In the same way though we have a general standard of intelligence yet in pronouncing different individuals to be intelligent or otherwise, we take into consideration their experience, education, heredity, nationality, etc. A child though he is not able to solve abstruse problems may yet be called intelligent. We do not expect the same amount and quality of intelligence in an 'intelligent' menial as we do in an 'intelligent' teacher.

In the same way though there is a standard condition which we call good discipline yet we cannot expect the same standard condition to be reached by every individual and group of individuals before calling him or them well-disciplined. A well-disciplined regiment of soldiers presents quite a different appearance from that of a well-disciplined class of school boys. An orderly meeting of uneducated rustics is something quite different from a well-conducted meeting of the Legislative Assembly. The variation from the standard is allowable even among such groups as form but parts of one and the same large group. Thus a well-disciplined class of masters under training is quite a different thing from a well-disciplined class of boys of Standard I. We do not expect (and if we do, we are unreasonable) the same kind of orderly behaviour from boys of the First Form as we do from boys of the highest form. Says Mr. Smith, "To expect the same kind of order from boys of 8 that you would from boys of 14 is contrary to all sound methods." Nor is this all. A good teacher will allow this variation even in the case of different boys in the same form. An English boy would be called well-disciplined even though he may not be quite

as submissive as a well-behaved Indian boy. Similarly an Indian boy may well be called well-disciplined even though he may not be quite as smart as an English boy entitled to the same epithet. Even among boys living in the same country we have to allow for differences of community, parentage, home-breeding, etc. In judging of the conduct of Parsi boys in Indian schools, for instance, we have to allow for a certain degree of exuberant energy, movement and mischief. In dealing with orphans, institutionalised children and all such children as are not well looked after by their parents, and as have not known the influence of parental love and sympathy we are, and should be, satisfied with a comparatively lower standard of orderly behaviour. In short our standard of discipline varies with differences in the sense of moral responsibility of the individuals under training; and the latter varies with various factors, viz., age, nationality, geographical conditions, heredity, education, etc. Inspectors should well remember this point while judging of the discipline of different schools and of different classes and boys in the same school.

Nor does this difference in moral responsibility affect only our standard of discipline, it also determines our method of training the different individuals to better discipline. Just as in teaching children our method varies with the intellectual equipment of the taught, so the method of training individuals to discipline varies with their moral equipment. So it is that in the all-comprehensive Hindu religion four different moral sanctions have been recognised, viz., the written word of the scripture, the example of righteous men, the law of the land, and lastly the approval of one's soul. This shows that different persons

can understand and follow different moral sanctions differing with differences in their moral responsibility. This is still more true of boys who, unlike adults, are growing individuals, and who, as such, feel very different moral responsibility at different stages of their growth. This should be well remembered by every teacher.

Roughly speaking boys develop three distinct standards of moral responsibility at three different stages of their physical growth, and may, therefore, for the purposes of considering the differences in the method of training, be divided into the following three groups:— (1) Junior boys between the ages of 8 and 12, (2) Middle boys between the ages of 12 and 15 or 16, and (3) Senior boys between the ages of 16 and 19.

Boys of group (1) have but little sense of moral responsibility in the strict sense of the word. They have no conception of law or good in the abstract. All that they understand is obedience to a person who is superior to them. "Mr. So-and-so says we are not to talk" is sufficient for them to know that they ought not to do so. In dealing with such boys, therefore, the right attitude to take is that of a benevolent despot. Commands must be given without qualification or explanation, and they must be obeyed without further question and as a matter of course. No evasion should be allowed. It is necessary also that the commands should be definite and easy to understand. If possible a definite system of daily routine should be followed. Further the boys of this age are instinctively fond of movement and action; so, they must be allowed enough, though regular, movement, and must be made to do the desirable act. These boys being also very impressionable, exhortation is very effective in their case

especially if the subject of exhortation be a definite act of a person. Again the boys being very impulsive, a fund of patience and a very vigilant supervision are necessary in dealing with them. Lastly cheerfulness helps greatly in dealing successfully with these boys.

(2) Boys between the ages of 12 and 15 or 16. This period is a period of rapid growth and superabundant energy. It is a period of growth of personality. Boys during this period gradually acquire the power of drawing inferences. Such boys are also fond of keeping secrets, and they develop a sense of class solidarity.

In dealing with these boys, therefore, the first thing that is necessary is that an outlet should be provided for their exuberant energy in the form of organised games. The boys being full of life, the manner of the teacher should be lively and not dull. The boys having a personality of their own, the dictatorial attitude of the lower forms will not do here. What is required here is a sympathetic and tactful treatment. Their self-respect must not be wounded and their sense of justice must be got on his side by the teacher. Their privacy too must be respected. Such boys also understand some general rules and appreciate the value of good habits for their own sake. This fact should be taken advantage of, and boys should be helped to form good habits and to behave well through respect for school traditions. Leading boys of the class should be won over on the side of school rules and good customs, and the rest will follow them.

(3) Boys between the ages of 16 and 19. Boys of this age are, from the point of view of moral equipment, distinguished by more purposive movement, greater mental balance,

greater appreciation of logical relations. In normal classes many are fond of knowledge for its own sake. They are also anxious to help in organisation and government.

Such being their moral equipment, order is easy to be maintained among them, and the boys of this class may be spoken to in a friendly manner. However this friendliness should not lead to any relaxation of the ordinary rules of class discipline. In cases of breach of discipline a few words in private are often enough. But if punishment is to be inflicted no petty punishment will do. It must be made a serious matter. A thorough knowledge of the subject taught helps a teacher a good deal in maintaining discipline and winning the admiration and respect of boys of this age. Appeal to principles and dignity should be made the basis of training to good habits. Some powers of government may well be delegated to boys of this age, by appointing them prefects.

These, then, are some of the important cases which show how the standard of discipline and the means of securing it vary with differences in moral responsibility. It must not however be forgotten that (1) these are not all the cases, and (2) that the above classification of boys is not absolute. There will be boys put here in Class I who will require to be dealt with like boys classed in Group I or III and *vice versa*. Again there will be many cases which will call for special disciplinary measures and especial judgment about standard of discipline which are not covered by the remarks given above.

Lastly we must also remember that though great variation both in the standard of discipline and in the means of securing it is allowable, legitimate, and even necessary, yet there is always a minimum of discipline.

which we ought never to fall, and that there are some persons so morally depraved as to be incorrigible. No teacher should tolerate any falling below the minimum, nor should any teacher allow the remaining in school of an incorrigible culprit to the detriment of the general discipline of the school and harm to the innocent boys. This no doubt is a confession of weakness, but it is a weakness which is unavoidable, a weakness which none can help. Even great religious teachers have not risen above it. Shree Ramkrishna Paramahansa is said to have refused to preach to some persons, saying that they were incorrigible. The Lord Krishna was compelled, as a last resort, to declare war against the incorrigible Kauravas. But such a decision should not be hastily arrived at. Only after all means of arousing a sense of moral responsibility in an individual have failed, then and only then should he be expelled.

TIKAMDAS D. GAJRA.

THE SCHOOL ARITHMETIC
BEING SOLUTIONS OF THE
QUESTION PAPERS SET FOR THE
LOWER SECONDARY
EXAMINATION FOR THE
YEARS 1880 TO 1904
 CHIEFLY INTENDED FOR THE USE OF PUPILS
 OF THE 1ST, 2ND & 3RD FORMS

BY

H. CHENNAKESAVA AIYANGAR.

Price—8 As.

**EXPERIMENTAL PSYCHOLOGY
 AND EDUCATION.**

BY

MR. M. V. GOPALASWAMI, B.A.

University College, London.

[All Rights Reserved.]

ONE sees in the advanced countries of the West a great upheaval in Educational Ideals and Methods. All sorts of new ideas and schemes are in the air. The "Montessori Method," the "Garry Scheme," the "Playway,"¹ the "Dalton Plan"² and the "Intelligence Tests"³ are all hailed as the precursors of a new birth, a renaissance of Education. What is it that binds all these rather isolated efforts after a better world for our boys and girls of to-morrow? It is a recognition that the central problem of education is the individual child: and nothing is more full of promise for the unravelling of the individual child mind than the recent developments in Psychology.

Behind all the simmering of thought and confused hankering after new ideals, there is shaping itself a new Science, of Education. Witness such books as "Experimental Education,"⁴ "Educational Measurement,"⁵ and that admirable book of Prof. P. T. Nunn, "Education, its Data and First Principles." Education is becoming more and more an Applied Science. Engineering and Medicine are applications to concrete human affairs of the truths of Physics, Chemistry, Mathematics and Biology. The Science of Education likewise can claim to draw upon Biology and Psychology. Education need no longer be a craft, trusting to crude empirical methods of trial and error. Nor can we afford to let it remain a matter

¹ Caldwell Cook. ² E. Dewey. ³ Terman.
⁴ Robert Rusk. ⁵ McCall.

of pure inspiration, a thing of gift. For how many Artist teachers are there among us?

Talent is a rare thing and we cannot wait until we have enough gifted individuals to go round every school in the country. The modern teacher does not claim to be an artist, fashioning the little ones under his care after the image of a brilliant suggestion; and much less a craftsman using dexterously certain tricks of his trade. For a rule of thumb will not do where each child presents a fresh problem. He has therefore come to value the true significance of scientific methods, or what may be called the scientific attitude of mind, in tackling the problem before him. He realises for the first time that the only sure high road to the prediction and control of events in any sphere of action, is a patient unimpassioned study of the relevant facts.

Now what are the data of education? Undoubtedly the processes of the growing infant mind — its capacities, aptitudes, and tendencies. It is just here that Experimental Psychology comes to the aid of the teacher. With its highly developed technique, Experimental Psychology places in the hands of the teacher an instrument for exact mental measurements. Here is a means of testing out, under carefully planned experimental conditions, the truth of many pedagogical doctrines, like that of "Formal Discipline." We shall develop this point in greater detail in the later papers.

But now we must turn aside for a brief examination of the position of traditional Psychology, — its assumptions, methods, conclusions, and pedagogical applications. For nothing less will be sufficient answer to the old experienced form-master, who has come to regard Psychology with supreme

contempt. Though he is quite right in assuming that "superior" attitude towards traditional Psychology, one has to admit that it was essentially through an irrational procedure that he has reached that conclusion. He is therefore very apt to scoff indiscriminately at everything that savours of Psychology. His well-grounded prejudice against traditional Psychology will stand in the way of his realising the immense significance of the recent developments in Experimental Psychology. It seems therefore necessary to state the limitations of traditional Psychology, and how attempts are being made to overcome them in the modern approach to and the study of mental processes.

Now what are the assumptions of the older Psychologist? His assumptions were varied and many. Each Psychologist had set his heart on some special hypothesis of his own, for which he boldly claimed universal validity and self-evidence. Often they came into clash with one another and were irreconcilable. If there was any unity in all this medley of First Principles, it was that each man's assumption was a direct reflection of his general outlook on life — a function of his glandular activity so to speak. We shall mention only some notorious differences in the assumptions which were supposed to be the bed-rock of Psychology.

One school of thought very vehemently maintained that Psychology was a science of the Soul — a soul possessing various faculties like perceiving, imagining, remembering, reasoning, etc. And there was the opposite school which proclaimed to all the world with equal vehemence and disregard of facts, that the mind was an immense bureau of myriad pigeon-holes with all its experiences

separately labelled and docketed for future reference. Apperception and association were the words to juggle with! Can we for a moment imagine to ourselves this state of affairs in any of the Physical or Biological Sciences? Philosophical bias was allowed to influence the axioms of Psychology. The Idealist took for granted that the Mind was a Spirit, and the Materialist likewise assumed that it was a very complex and delicately-poised mechanism. The evil did not stop here; Philosophical bias not only influenced the assumptions, but often took the place of observation of actual mental processes. Thus James attempts to reduce an emotional state to a cluster of sensations of blood pressure, muscular tension, etc. Likewise Titchner sought to resolve thought processes like reasoning into sensory elements. Questions of metaphysics were not separated from questions of fact. In the human craving for systematisation, it was forgotten that it was a great achievement in itself to get a firm grip of the facts in question, though one may have to wait for explanation. Amidst much confused and fruitless speculation, there were not wanting self-complacent gentlemen of mediocre talent who would weakly protest, "Both are right and both are wrong." While what was wanted was the clarion call of the Study Scientist. "A plague on both your Houses." Leave metaphysics alone and settle down to a study of mental processes as they occur. "Try to understand *how* exactly they occur before you attempt to explain *why* they should happen at all."

What shall we say about the methods of the older Psychology? They were still more unscientific. Casual observations, interesting anecdotes, hazy reminiscences, fanciful ex-cogitations, biased introspections were all

given equal credence as forming the proper material for a Science of the Mind. The striking and the dramatic events in the mental processes were noted down with avidity and hasty generalisations made therefrom. But the abnormalities, the freaks and the obviousness are not always the most significant from the point of view of Science.

Again, the older Psychologists were too narrow in what they considered the proper method of obtaining the facts of mental life, namely, the method of introspection. Now where did this land them? As Tansley very properly points out, it led to the placing of "great over-emphasis on conscious perception and on reasoning processes — an over-emphasis which threw the picture of the mind quite out of perspective and prevented anything like true comprehension of its actual working." The narrow code of introspective method at once rules out of court much valuable data with regard to our unconscious mental processes. "The modern psycho-analytical researches in the field of psychopathology have much to contribute towards our understanding of the workings of the normal mind."

"The New Psychology obtains its material from the whole field of mental life, normal and abnormal, from outward observation and from introspection, from the study of behaviour and conduct, from Art, literature and practical life, from mythology and history, from habits and customs of primitive peoples, and from those of the most advanced civilizations."

Another very serious limitation in the method of the traditional Psychologist was that the concepts which were so glibly used

¹ Tansley — "New Psychology:" George Allen and Unwin, 1920.

were never defined. There was no fixity or precision of meaning in the terms used. It was all nebulous and fluctuating. The more vague and accommodating the concepts, the more easily could the meanings be strained to meet the exigencies of the controversy. Thus the words "Attention" and "Apperception" have borne the brunt of the abuse. "Attention" is used as synonymous with "clearness of consciousness" in one place, and in the very next sentence is made to function for 'a feeling of strain.' I mention only two of the multitudinous interpretations put upon that much abused word. We do not mean to suggest that the New Psychology has overcome this deficiency with any marked degree of success. Heroic attempts are being made to give relative fixity to the terms in use, by frequent International Conferences, Symposiums and what not. It is a great thing in itself to see where we are going wrong and to recognise the need for a definition of concepts in use, rather than to feel self-complacently that everything will come out right in the end.

Again, the older Psychologists did but too often indulge in analogies, in place of true scientific analysis. It is one thing to use analogies, symbols, diagrams and schemata, for the purpose of clearer exposition, and another to draw inferences from, and attribute causal efficacy to, such figments of the imagination. The fallacies of the Associationist Psychology could be traced to an over-ready deduction from a schematic brain physiology. Phrases like "the stream of consciousness," "the focus of consciousness," are very commonly used. Imagine a physicist talking about molecular attraction in terms of love and hatred! Of course he talked of "Nature abhorring a vacuum." But those were other days.

Lastly, nobody dreamt of using Quantitative Measurements in connection with mental processes. Measure; how indeed can one measure the unextended mind, the elusive phantom soul; yet the truth is, to put it bluntly, the moment Psychology got free from Metaphysics, and began to apply Mathematics, it became a Science.

With all the fore-mentioned deficiencies, it is no wonder if traditional Psychology often arrived at contradictory and fanciful conclusions inapplicable to concrete instances of everyday human behaviour. We have already mentioned the "Faculty" and the "Associationist" Psychologies, as the product of such faulty methodology. The "Hedonistic" doctrine, that man always strove for Pleasure, and the "Rationalistic" theory that he has always acted on reason are again fruits of the same perverse attitude. Now where do such doctrines lead in the realm of educational practice? It is a matter of common knowledge how closely the "Faculty Psychology" is connected with the theory of "Formal Discipline." The teaching of Classics and Grammar found a fresh justification on the assumption that they trained the various faculties of the mind. The boy who has passed a needless drill in grammar, was supposed to be able to reason well. Whereas, the pupil, owing to his natural lack of interest in a purely formal subject, has been allowed to form habits of inattention, to acquire a distaste for intellectual work. The doctrines of this Associationist School on the other hand, lead to equally lamentable results in school practice. Now the emphasis is on the storing of the mind with encyclopedic information, to the neglect of useful attitudes and habits of thinking. The Kindergarten method is yet another instance

of the false Psychology, insinuating itself into school curriculum. On the strength of the Hedonistic doctrine of "Pleasure" as the motive of all action, the children were allowed to 'fool' with a vast array of sensory and motor apparatus. It promoted impulsive and sporadic activities, but not correct thinking. For the genesis of true thinking, there must be some purposive activity, presenting a problem — which will give rise to many suggestions. The systematic development of such suggestions, the sifting of evidence, and the adoption of one of them as the true one to act upon will constitute genuine thinking. The fostering of such habits of logical thinking will be the true aim of education.

We have rather strayed away at some length from our main topic — Experimental Psychology and Education — into the archives of traditional Psychology. This we were compelled to do, because traditional Psychology is by no means dead. It is still alive and kicking, often masquerading under new terminology, to pass muster against the prejudices of the Modern Age. We have therefore to distinguish carefully between the old Psychology and Experimental Psychology, lest one's just aspersions against the one should be indiscriminately directed against the other. We are now ready to examine how Experimental Psychology has striven to negotiate the pitfalls into which traditional Psychology fell.

Firstly, Experimental Psychology has most frankly and unambiguously disassociated itself from the arid discussions of metaphysics. There is no reason why Psychology should ever be a handmaid to Philosophy. The physicist does not go behind the phenomenal world and question the Reality of our

experience of the external world. Surely there is something to be said for a similar treatment of the mental processes. This in itself was a great achievement. The next step towards making Psychology a Science, was the attempt to submit the data of mental processes to the mathematical treatment. Science begins with accurate measurement. Precision is the very matter of Science. As Lord Kelvin remarked, "Nearly all the grandest discoveries of Science have been but the reward of accurate measurement and patient long-continued labour in the minute sifting of numerical results." The study of any body of facts becomes scientific, in so far as Mathematics enters into it. Why should it be so? Because the "aim of Science is to work out descriptive formulæ — as short as simple, as complete and as consistent as can be devised. It does not inquire into the *why* of things, the purpose or the significance of the cosmos, that is not its metier." In this connection, one cannot resist the temptation of quoting Karl Pearson: "The law of gravitation is a brief *description* of *how* every particle of matter in the Universe is altering its motion with reference to every other particle. It does not tell us *why* particles thus move It simply resumes in a few brief words the relationships observed between a vast number of phenomena. It economises thought by stating in conceptual shorthand that routine of our perceptions which forms for us the universe of gravitating matter."

When a view of Science, essentially descriptive is accepted, the significance of the use of mathematical formulæ and statistical methods will be apparent. They are the only means of stating the observed uniformities in a vast array of facts otherwise unmanage-

able, a simple illustration being a graph which shows at a glance the general outcome of a multitude of measurements. Indeed it has been seriously put forward by a writer¹ of great eminence that it is only Mathematics that will help in the solution of ontological difficulties.

"So, Experimental Psychology attempts to express subjective experience as a series of equations, resolving the complex on one side of the equation to its elementary components on the other."² It is not content to talk in vague general terms like "Attention," "Reasoning," etc., as if they were simple unitary processes. But it seeks to analyse them to their irreducible datum. Under strictly controlled laboratory conditions, it is able to isolate or emphasise certain variants, and thus judge its efficacy in the total response. Thus with the aid of simple apparatus, the degree of attention, the fluctuations and the oscillations of attention have been measured. Conditions under which the best results can be obtained in memorizing have been most elaborately worked out by Ebbinghaus, Pechstein and others.

¹. Bertrand Russel.

². C. B. Myers: *Expt. Psych.*

³. *Social Psychology.*

Further the New Psychology has made a very important departure from the traditional Psychology, in that it has adopted the comparative method. The behaviour of animals and of primitive men are being investigated with a view to knowing more about the child mind. Much labour is also devoted to the study of mental derangement, which promises to reveal to us in their elemental phase the complex behaviour of the normal person. Thus McDougall³ sought to derive his primary instincts from cases of disassociation in abnormal Psychology, and not on any fancied *a priori* grounds.

The achievements of Experimental Psychology are rather a long story and will be beyond the scope of the present paper. We shall deal with only a few of the most recent developments in Psychology that are of great significance for the world of education, *vis.*, the Intelligence Tests; the Unconscious; Psychology of Learning, etc. Each of these will be dealt with in subsequent papers.

A Manual of Arithmetic.

By the late MR. S. RADHAKRISHNA AIYAR, B.A.,
Principal, Maharajah's College, Pudukotah.

Approved as a Text-book for all Classes and Forms.
Vide Fort St. George Gazette, 24th Jan. 1907.

Very useful for School-Leaving Certificate Examination

12th Edition (1921).—Price Rs. 2.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

THE ANDHRA UNIVERSITY— POLICY, ORGANISATION, AND ADMINISTRATION.

BY

MR. G. SATYANARAYANA MURTI, M.A.,

Professor of History and Economics,
Noble College, Masulipatam.

IN my past contributions, a pointed reference was made to the following characteristic features which should be regarded as the essentials suggestive of some detailed aspects of the Andhra University policy, organisation and administration:—

1. The Andhra University should have as its basic inspirer the present national awakening and Andhrodyamam.

2. The Andhra University should be partly teaching and partly federal; it need not aim at the costly typical features of a residential University of the western type.

3. There might at present be chosen one University centre but some at least of the existing or the hereafter-to-be-instituted colleges should be organised as potential Universities.

4. Neither all high-grade colleges giving vocational training nor all opportunities for post-graduate studies should be monopolised by the University centre.

5. The chief if not the sole medium of instruction in the University should be Telugu with as much of English as is absolutely necessary for inter-provincial and international purposes of communication and understanding of some aspects of scientific literature which may not at present be possibly rendered into Telugu. Telugu must be the compulsory medium of instruction and examination in the pre-University courses of study and in as many as possible at present of branches of higher University education as

well though English is to be studied as a compulsory second language along with scientific translation of English into Telugu and of Telugu into English in all stages of education; there must be created speedy facilities for the creation and popularisation of Telugu literature dealing with all branches of western learning.

6. The classes corresponding to the Intermediate classes of the Madras University should be reformed and become part and parcel of the Secondary and Intermediate education in what might be called Collegiate High Schools or Intermediate Colleges that should be administered and controlled by a well-represented Board of Secondary and Intermediate Education, and that should prepare students for vocational training and University courses of study.

7. The defects of the present Madras University organisation and administration should be carefully avoided in the proposed Andhra University towards which the Government should maintain an ideal and sympathetic attitude.

I now proceed to give a rough survey of what I consider to be some important problems that arise directly or indirectly from the acceptance of the foregoing as the essential features of the Andhra University.

1. THE GOVERNMENT AND THE ANDHRA UNIVERSITY.

The true end and aim of education can only be attained by identifying the real requisites of national education with living forces for good which are latent in the State. The relation between the State and the University as an educational organisation of the nation should be analogous to that between life and breathing. Neither can nor should exist without the other. The interests of the

de facto State and the Indian people which at present seem to suffer from the socio-political defects of partial or wholesale disagreement with one another should be permanently and on an unimpeachable basis be fused together and then alone and not until then, is there any possibility of an ideal Indian University under the ægis of the State and formulating a truly national education policy. Since in our incomplete and halting political stage of self-government as determined by the recent reforms some sort of divorce between the State and the Indian people is inevitable, the Indian Universities including the projected Andhra University must, in spite of education being a transferred subject, be content for the time being with a mere expectation of a sympathetic and broad-minded policy on the part of the Government, the legal relations of which to the Universities might be determined by carefully devised Imperial and Provincial legislation. Again, until the creation of a separate Andhra province with all that it politically implies, the Andhra University is bound to suffer to more or less extent from the delicate difficulties of the provincial administration of Madras in responding to the recurring and non-recurring financial help to the proposed Andhra University and to some other Tamil or Malayalam Universities which must sooner or later arise in Southern India. With regard to both the genesis and the future progress of the embryonic Andhra University, a very liberal and statesmanly policy is expected of the present Madras Government and even the Imperial Government in the matter of a broad-minded settlement of many puzzling questions of finance, the possible objections of the Oriyas and the Tamilians of the border patches of territory in the Telugu districts to the popular and

right ideal of making Telugu the medium of instruction, the necessity of a well-conceived special statute for the Andhra University though there might of course be an Imperial Statute covering the interests of the Indian Universities, and many other difficult points that, though at present not clear, would ere long crop up in bewildering confusion. The duty of both the Government and such of the people as are interested in the inauguration and growth of the Andhra University is to see that its progress is not in any way hindered by any unfortunate happenings or party prejudices or biased views or jaundiced excesses in the present times of socio-political fermentation. The Madras Legislative Council should hereafter be specially represented by Andhra educationists as well. The Minister of Education and the Legislative Council should consult the governing bodies of the forthcoming Telugu University on all matters connected therewith. With regard to the creation of special educational officers connected with the existing Department of Public Instruction and their relation to the proposed Board of Secondary and Intermediate Education and the University in general, there should be made satisfactory arrangements by some official or non-official member of the Madras Government bringing in due course a well-thought out Bill before the Council. Further, a professional rather than a service organisation of teachers is deemed desirable; and as early as possible the Andhra University and its affiliated institutions should have the benefit of teachers who should no longer groan and grumble as under the existing difference between the pay and prospects of private institution teachers and those of the members of the Government Educational Service. Let not the Government any longer

shelve this problem but boldly face it and see that even teachers of privately-managed institutions affiliated to the University have all the benefits of fixity of tenure, pay and prospects of promotion to higher cadres, pensions, gratuities, provident fund, leave, furlough, transfer, etc., as are enjoyed at present by members of the Government Educational Service. I am not unaware of some practical difficulties but apart from other considerations, if the Andhra University and its affiliated colleges and other institutions are to prosper, the difficulties whatever they might be must be bravely tided over and no insidious distinctions between Government institution servants and private institution servants should be allowed to exist. In the interests of the unity of national education and the substantial dignity and attractiveness which the teacher's calling should henceforth acquire, I am in full sympathy with and recommend to the Government and the present Sub-Committee the adoption of the suggestions of the Calcutta University Commission Report (*Vide* pp. 325—328, paras 21—28, Vol. V). Again, the prosperity of the Andhra University (I may even add all the Indian Universities) is closely bound up with not only the Government richly endowing the University and sympathetically effecting the necessary legislation and satisfactorily dealing with the possible puzzling questions that might arise but also doing another service so as to make the University an abiding monument of truly national education worthy of the ideal of full-fledged self-government, the near goal of India's political future. Without labouring the point any further, I will address myself to the ideal of self-government in the Andhra University and its relations to the Government of India and the Provincial Government.

Indian Universities would no doubt conti-

nue, for a long time to come, to receive financial help from the State but that should never be urged as an argument for denying the privileges of self-government to the University. To the alumni of the Western Universities accustomed to the independence of the democracy of letters, the control claimed by Government over Indian Universities must appear anomalous. I do not seek to religiously boycott all Government element in the organisation of the forthcoming Andhra University but what I generally emphasise is that the present system of Government control over the Indian Universities should be thoroughly reformed and the Indian Universities including the Andhra University should no longer "suffer for want of volition, independence and initiative, and the time has arrived when the cultural progress and general awakening of the people entitle them to freedom in higher institutions of learning without the interference of bureaucratic authority." There must of course be retained some *formal* control over the University but the Government should learn to develop a convention of non-interference. Only general control in matters other than academic should be reserved to the State and even here, the Government should not unduly interfere. As to the broad relations between the State and the future Andhra University, my view is that *in matters purely academic*, the State ought not at all to interfere and the University ought to be given perfect autonomy in this matter. For it must be borne in mind that the worst form of State tyranny is tyranny over thought. Further no corporate body in the country is better fitted for full self-government than the University as all its members are adequately educated, responsible persons. Such self-government is essentially necessary for stimulating a public interest in its affairs, for increasing the flow of benefac-

tions towards it, for preventing abuse of power by cliques and for making the University a part of our national life. We cannot do the best for it and cannot have the best from it so long as we cannot rightly consider it our own. The arguments that the Government control of the Universities should be full and unrestricted since the Government finances them to more or less extent and since it is the Government that recognises their certificates and degrees as qualifying for public service—these arguments when pushed to their logical extremes would appear so absurd that the Indian Universities cannot but feel them an insult to their superior learning and the representative characters of their governing bodies.

The Government must be content with a general audit of the main items of the University expenditure but it will be insalubrious to the growth of higher University education if its lay officers presumably unconnected mostly with the details of University work annoy the University unduly with regard to its detailed policy either by securing artificial majorities in the University Senate or by wantonly obstructing the grant of what the University thinks to be necessary.

2. THE UNIVERSITY AND PUBLIC SERVICE.

This is a big subject in itself and I will therefore touch on a few salient points of interest. The common argument that University education should not be a passport to Public Service cannot and should not hold water in India. As vocational training should form a special feature of the proposed Andhra University, I think it is advantageous to the public services, to the students and to the advancement of learning that University examinations supplemented by a few special tests should be regarded as a qualification for office under Government. The hope of getting suitable and high posts

serves as a great stimulus to students and encourages them to make progress in learning. For special kinds of administrative posts requiring special knowledge not covered by University tests, special tests would be desirable. For the recruitment into service of lower cadres, I propose that apart from the provision made for vocational training in the pre-University courses of study in the Collegiate High Schools, there must be instituted what might be called "*Continuation Schools*" that should train students for some offices of the Government. Such institutions, if well-conducted and placed under the control of the Department of Public Instruction aided by a few administrative experts would relieve largely the unseemly spectacle at present of B. A.'s and M. A.'s crowding into the Government clerical services and other lower offices. As for high administrative training, since public administration according to my scheme, becomes a special subject of University study, the University might be instructed to provide for special branches in the general subject of public administration. In a country aspiring to have full-fledged autonomy and democracy, it is but right that this should be done and those who take their degrees in the various branches of public administration should be eligible for highest posts under the Government. I have not got before me the statistical record of the number of graduates employed now in the various departments or the Public services in the Madras Presidency but a rough glance at the University Calendar convinces me that some very large number of graduates is found figuring in most departments that do not at all require the knowledge and erudition of graduates. Such a state of things shows clearly that the higher interests of University research, etc., are being handicapped by the present Indian Universities

manufacturing graduates for no better purpose than that of filling clerks' posts in some Government Office and other high positions too which require not a graduate's education but a practical education of a different sort. I suggest that in the interests of higher University education which can serve better administrative purposes, special vocational courses of study may be prescribed and taught in some "Continuation Schools," "Industrial Schools," "Banking and Commercial Institutes," "Engineering Schools," and "Agricultural Schools," distinct from the University. No graduate qualification but practical training in the above institutes should be deemed necessary. These institutions might be controlled not by the University but by the Department of Public Instruction or special Boards subject to the supervision of the Ministry of Development. Some high administrative posts should be open to graduates after due courses in high-grade vocational colleges which should be under the control and supervision of the University. The Government should not, as at present, in most cases, disregard the degrees and diplomas of the future Andhra University in preference to those of the foreign British Universities. According to my conception of the higher courses of studies, there will arise from out the portals of the forthcoming Telugu University not only qualified degree and diploma-holders in most of the ordinary sciences and arts provided for in the existing Indian Universities, but also experts in Agriculture, Law, Medicine, Teaching, Economics, Commerce, Technology, Industries, Journalism, Military Science and various aspects of public administration and such other vocations as will in the words of His Majesty the King-Emperor make the students "useful, manly and loyal citizens of the Empire." Unless the Government as at present constituted changes entirely its angle of vision and employs the products of the coming University in the highest departments of State administration and so improve the agricultural and manufacturing industries of the land as to find lucrative outlets for the benefit both of the University products and the country at large, the progress of the Andhra University can never be said to be

assured nor can the relations between the University and the Government be said to be what they ought to be. The suggested policy is, if adopted, bound to prove a correct solution of the many social and political grievances of the people of this country. There must soon be effected reforms in the system of recruitment for the public services and covenanted civil service. There should be encouraged a demand for the best University men on equal terms at least with the Europeans though in special departments the European element must according to popular will be gradually eliminated. It is an open secret that some flagrant violations of ordinary justice in the matter of undue preference for white skin (simply because it is white skin and for no other earthly and satisfactory reason) in most departments are at the bottom of some aspects of the present political unrest in the country. It is nothing short of an unmeaning platitude in these days of national awakening to argue that the object of University education is not to be an utilitarian entry into a vocation but the love of knowledge for the sake of knowledge. The average Indian even does not require of the University to provide him with only knowledge of such a sort as by its acquisition and no further market exchange thereof will prove a big ideal or religious or metaphysical end in itself. It is not meant that the University should shun all activity in the direction of spreading even knowledge of that type but it should not be the be-all and the end-all of a modern University which should make extensive provision for useful vocational training. If the University is given a large degree of freedom of teaching and study and develops with Government help and patronage the various opportunities for highest administrative and vocational training along with a modicum of studies of a literary and humanitarian character, it is not unreasonable to expect that the life and activities of the University would ere long stimulate and be in turn stimulated by those of the State.

(To be continued.)

ENGLISH HISTORY IN THE INTERMEDIATE CLASSES.

IN spite of an expenditure of about eight years of his life in the study of the English language, the average Intermediate student finds it difficult to write correct not to speak of good English. The standard of lecturing has to be lowered considerably and the students have to be spoon-fed. Is it not uneconomic and unnutritious to the intellect that every subject is taught in a foreign language? On the other hand, it is urged that a common language is essential and if all subjects except English are taught in the vernacular, then the students' knowledge of English may not be sufficient to follow the lectures in the B. A. classes. The question of languages is an All-India question. It is a knotty question too.

The second question that crops up in the mind of a teacher is if what all the students now study is useful or necessary and if what all the teacher now teaches or dines is stimulating or adding to their knowledge. From the Palæolithic men who first occupied Britain till the treaty of Versailles and its aftermath (for a question was asked in 1916 about the part played by the Navy in the war of 1914!) forms the range of their study. Though we have passed the stage of Date and Fact History we still suffer from its evils. We prepare notes from the books ready to hand and cram the students with facts, say, in an analytical manner. Over-lecturing is also accompanied by under-reading by the teacher and students and examinations therefore lead to the physical and intellectual degeneracy of both. A student cannot read for liberalising his intellect when he has to remember so much for the examina-

tion. A teacher cannot read for increasing his knowledge for (1) he has to prepare for two or three subjects every day and his class lessons are more important than extra knowledge as examinations are more important, and (2) he has to lecture perhaps for about 12 hours a week. Under these circumstances, such books are luxuries as, Original Sources of English History, Traill: Social England, Stubbs, Hallam and May, Gardiner, and Macaulay, and numerous biographies, novels, essays and poems without reading which he cannot be well-versed in English History.

Now a certain portion has to be gone through and questions may be asked anywhere by some examiner from a remote corner of the Presidency. The teacher and student plod on wearily through several small reigns and unimportant and uninteresting details. The students may study in detail, but it must be left to their will and pleasure. The details are not fit subjects for examination.

Some of the questions that were put in the examination held in March 1922 are clearly out of the way and insignificant. Here are a few:—

(1) Describe the policy of Dunstan and estimate its importance.—A more insignificant question cannot be imagined.

(2) Account for the weakness of England which led to the Norman conquest.—According to my plan of study, I will expect from the student something like the following as an answer to this question. He may give more details.

Before the conquest there was no strong central Government. Strong kings like Alfred and Canute were exceptions. The kingdoms which came to form England could

not soon forget their days of independence. There was also another cause for weakness. England was plunging into a dangerous kind of feudalism. The king was rivalled by several Earls or Lords in wealth and influence. The part played by Godwin's family in the reign of Edward the Confessor is illustrative of the want of strong rule which England sorely needed. Harold was promising but he had many enemies in his once brother-nobles.

I don't know if the examiner will not consider this as too general or pass over it with a few marks as too small for 25 minutes!

N.B.—One year the reigns of Canute and Stephen were asked to be described. Hereafter we hope such questions will not be asked.

(3) Show how Scotch hostility to England affected the course of the Hundred Years' War.—This is killing.

(4) Show how the character of James I affected his relations with Parliament.—One may wonder why I criticise this. My objection is that it is insignificant considering the extent of study. Who can say that the character of any of the following is unimportant:—Alfred, Ethelred, Canute, The Confessor, William I, Henry II, Richard I, John, Henry III, Simon, Edward I, Edward II, Richard II, Henry V, Henry VI, Margaret, Henry VIII, Elizabeth, James I, Charles I, Cromwell, Charles II, James II, William III, Walpole, Pitt, George III, Pitt, Nelson, Wellington, Peel, Palmerston, Gladstone, Disraeli, Salisbury and others. There are many important figures in the histories of Scotland, Ireland and the British Empire. I do not say that the students should not study their characters, on the other hand, they must be acquainted with them. But what is the scope of the answer if any question is asked about them? The examiner alone

knows it. It is an infliction to ask an IndianIntermediate student who has many subjects besides, to be prepared with the characters of the abovementioned to answer one question for 25 minutes, if such a question is asked at all. One year the character of Marlborough formed part of a question. It would have been better if it had been in an Honours Examination paper. Thank God, there was no question about his tactics, strategy and plans of campaign.

(5) What part did Scotland play in the Civil War?—It is enough if the students simply know that Scotland helped Parliament in the Civil War on certain conditions.

Out of such a vast field in which important problems have been solved, I am curious how the examiner was able to pick out such choice questions. I am not a revolutionary. My object in criticising the present system of examination is to show that the Indian student is actuated by the motive of knowledge and guidance whereas the English student has the stimulus of patriotism also, and to the latter every battlefield, every historical person, every plot or incident will have a charm and interest. The fatal tendency is to put on the lion's skin. But it must be said to the credit of the present day examiner that bad or irrelevant questions are becoming rare.

Again, it has been a standing complaint that two hours is not sufficient to answer five questions. Our primary object must be to see if the student has grasped the main currents of English History as a part of European or World History. He may read much, he may be taught much but not for the examination unless you want to test if the teacher has shirked his work or to encourage an artificial and temporary storing of facts.

SOME REMEDIES.

(1) The teachers should be fully represented in the Boards of Studies and Examinations.

(2) The students should not be bothered with too many lectures, dictation of notes, frequent written examinations and their brains should not be stuffed with facts and dates, charts and plans.

(3) The students should be trained in Essay-writing and Speaking. They should be allowed to read for themselves as far as possible. One good lecture a week in English History will be enough to stimulate the students' interest. Therefore in every college we may have one able and well-paid Professor and many tutors according to the strength of the classes.

(4) The students should study their vernacular or Sanskrit as a compulsory subject. Indian History should also form part of the study of the History students. As the course will be more extensive, the scope of English History will have to be limited. As already said, the main currents of English History have to be taught. We shall take it that the students are conversant with the important events in English History in a chronological order when they come into the Intermediate class. Here it will be advantageous to adopt the topical method. I may mention a few important topics.

I. Foreign Policy:—

England's attempt at a Continental Empire.
The age of discoveries.
The Duel with Spain.
The Rivalry with Holland.
Wars with France—Louis XIV; Napoleon.
The Russian Question.

The British Empire—India; Federation.
The German Peril.

II. Constitutional and Religious:—

Political and racial consolidation of England before 1215. The attempts of the King to put down the disintegrating local, feudal and religious elements.

The development of Parliament.—Premature constitutionalism.

Tudor Despotism: Wycliffe; the Reformation.

Struggle with the Stuarts.

Constitutional Monarchy, 1688.

The Present Constitution—Religious Toleration; Cabinet system.

III. Economic:—

English Rural life, mediæval and modern
English urban life " " "

History of the English manufactures—The Woollen Industry.

The Mercantile system.

The Growth of Commerce: Companies; Bank of England; Trade Wars.

The Industrial Revolution—Benefits and evils—How the latter have been remedied—Socialism—Pauper Problem—Co-operation.

Free-trade—Colonial grab—Empire and Trade.

IV. Social History also—

A short history of English literature.

V. Wales and Scotland.

VI. Ireland.

VII. The Geographical features of the British Isles and the British Empire.

There will certainly be repetition but it can be done to the advantage of the students. It all depends on the teacher who has to instil in their minds the evolution of British character, constitution, commerce and

empire. It cannot be too often repeated that the students are Indians and the scope of their study of English History must be limited.

The importance of English History in any scheme of liberal education cannot be exaggerated. It is of absorbing interest and highly instructive. It is great in several respects. It is the history of a people who attained nationhood early and who have prized national, political and civil freedom above everything else. The English Constitution has been the model for the world. Her foreign policy has been crowned with the acquisition of the biggest Empire and a study of it is a study of the World History in a brief compass. From the economic point of view her progress teems with lessons. Add to these a noble and glorious literature. Above all, English History is a study in organic evolution. The students must understand this—not the dry bones of facts but the perennial current of English life running in so many channels—their source, inter-connection, use and end.

K. R. SUBRAMANIAN.

KARUNATARANGINI

(English translations from the author's original lyrics in Sanskrit)

By K. KRISHNAMACHARYA, B.A., L.T.

WITH A FOREWORD

By PROF. P. SESHADRI, M.A.

Price 4 as.

"The poems are full of melody and fine sentiment."—*C. H. C. Magazine.*

The translations are readable.—*The Daily Express.*

SRINIVASA VARADACHARI & CO., Triplicane, Madras.

THE EDUCATIONAL POLICY AND THE REFORMED GOVERNMENT.*

I may be told that the subject to be opened for discussion this evening is an old one but it seems to me that the recent ministerial pronouncement renders a careful examination of the principles of the general Educational policy necessary. Further, the grievances of teachers remain unredressed in spite of numerous representations to the authorities.

The problem which in the opinion of the Government of India, every administration will have to face, is the provision of adequate conditions and prospects for the numerous teachers employed in privately-managed schools. Our local Government has not till now cared to give that careful consideration to this problem which it requires, but has allowed things to drift. On the eve of the introduction of Montford Reforms, it was pointed out that education would be a transferred subject, and that it would, in the hands of a popular Minister, make rapid progress in all directions. It is natural therefore that the teachers have been anxious to know the views of the Hon'ble Minister of Education in respect of their salaries. Representatives of the Teachers' Associations have waited in deputation upon the Minister, and have presented their case. The Minister told the Teachers' Guild that he was no stranger and that he knew that the teachers in schools under private management were miserably paid. He hastened to add that their position was also insecure.

* A Discussion opened by Mr. M. S. Sabhesan, M.A., Christian College, Madras, in a public meeting held under the auspices of the Madras Teachers' Guild, on 10-11-22.

But the view he expressed in a speech he delivered at Madura in August 1921 showed a different spirit. This view might be described as the policy of Non-intervention since the Minister held that the question of the salary of teachers in aided schools was one for the management to consider. This view appeared to me to be contrary to the spirit of the Educational policy and I desired that the Guild should express its disapproval. Some members felt that the matter need not be pressed, since there was no authoritative report of the speech.

This embryonic policy of Non-intervention has in the course of one year been rapidly developing, and in the reply to the South India Teachers' Union deputation, we have a distinct pronouncement. The Minister is reported to have said, "His view was that the relation between the teachers and managers was like that between the employees and employer in a commercial concern, and that it would ordinarily be hard for the Government to intervene." It is not quite clear from the report of the Minister's reply what view he holds about the relation between the Government and management. The Minister should have known that the educational system is a triangle of which the Government, the management, and the teacher, form the three sides. What kind of triangle it is depends upon the organisation, enthusiasm and sincerity of the three factors.

It is my intention to discuss to-day whether this view of Non-intervention is in accord with the principles of the Educational policy, and whether the Government can afford to be a disinterested spectator of the unseemly fight between managers and

teachers implied in the pronouncements of the responsible Minister.

What is the Educational policy as the outcome of which so many aided institutions have come to stay. There are four documents which deal

The History of Educational Policy.

at length with the principles the Government should follow with regard to the spread of education in India. The Educational Despatch of 1854 issued by the Court of Directors is the first and the most important document, and it states that "the most effectual way of providing for the want of India will be to combine with the agency of the Government, the aid which may be derived from the exertions and liberality of the educated and wealthy natives of India and of other benevolent persons." In another place it states clearly, "We look forward to the time, when any general system of education, entirely provided by Government, may be discontinued with the gradual advance of the system of the Grants-in-Aid, and when many of the existing Government institutions, especially those of the higher order, may be safely closed or transferred to the management of local bodies under the control of and aided by the State."

This policy of State-aided education was re-examined by a Commission in 1882 and its report contains many valuable suggestions. This Education Commission emphasised that the Government should adhere whole-heartedly to the spirit and principles laid down in the 1854 Despatch. It was convinced that "there had been lack of sympathetic treatment of private effort." Also we find it once again stated "that, while existing State institutions of the higher order should be maintained in complete efficiency wherever they

are necessary, *the improvement and extension of privately-managed institutions be the principal care of the department.*"

Anticipating the step-motherly treatment to aided-schools, the Commission is careful to point out that "a periodically increasing provision be made in the educational budget of each province for the expansion of aided institutions." The Government of India, in accepting its recommendation, is compelled to remark thus: "It appears from the report that the experience of nearly 30 years has brought to light no serious flaw in the general outlines of policy laid down in 1854 and confirmed in 1859. If, in any province, unsatisfactory results are brought to notice, or, if the progress made in any particular respect is shown to have been less than what might have been hoped for, this will almost invariably be found to have been due to a departure from, or failure to act up to, the principles of the despatches upon which the whole educational system rests."

This principle of State-aided policy is reiterated in the Government of India Resolutions of 1904 and 1913. The resolution of 1913 admits that "the underlying idea of the Grant system, the subvention of local organised effort, has not always been maintained," and in order to rectify this, it recommends that "the Grant-in-Aid rules should be made more elastic." In the Seventh Quinquennial Review (1912-1917), we find the history of the educational policy briefly and clearly described thus: "The policy of entrusting much of the educational activity of the country to societies and individuals dates from the Despatch of 1854. The main reason for initiating this policy was the consideration that the Government with its limited resources could not cope with the

almost boundless exigencies of the situation. The 1882 Commission declared the improvement and extension of private institutions to be the principal care of the department. The Resolution of 1913 enunciates a policy which may be summarised as the encouragement of privately-managed schools under suitable bodies, *maintained in efficiency by Government inspection, recognition and control, and by the aid of Government funds.*"

We may therefore take it that the State-aided educational policy, outlined in the resolutions of the Government of India, requires every local Government to take up the initiative in encouraging private bodies to found schools and colleges, to aid these bodies adequately, and also to exercise a judicious control over the schools managed by them so as to ensure stability and efficiency. These are the duties imposed upon the authority in whose hands the portfolio of education happens to be placed. Indifference to, or disregard, of, these three-fold duties, will mean a set-back to the educational progress and result in a break-down of the educational machinery. The charge of being indifferent to the educational progress of the country cannot be laid at the door of the Government of India, for time and again it has pointed out the directions in which the local Government should move. But our local Government had ideas of its own, and in fairness to the Minister, it should be stated that the departure from the sound principles of the educational policy has begun long ago with the Government taking over the management of some schools and colleges.

Three-fold duties
of the State.

Let me now examine whether the view of non-intervention held by the Hon'ble Minister is justified in the light of the policy clearly laid down by the Government. The chief fact that stands out prominently in the resolutions of the Government of India is that all the educational institutions, whether administered by the Department or by private bodies or by Municipal and local bodies, form an integral part of one national system, and it follows therefore that the efficiency of the aided school is as much the concern of the State as that of the Government institution. The authorities entrusted with the duty of control will have to take into account, the financial stability, the sincerity of the managing body, the ability to pay adequate salary to the qualified teachers, equipment, etc. Teachers take service in Aided schools chiefly because of the guarantee held out in the pledges that, in the eyes of the Government, institutions of all types will be considered to stand on an equal footing. It is therefore surprising to be told that the Government is unable to interfere with the management in the important question of the salaries.

We no doubt desire that the freedom of the managing body should not be unduly interfered with. The educational policy contemplates the granting of a certain measure of freedom so as to enable the private bodies to take the initiative in giving religious or vocational instruction, in prescribing suitable text-books, in providing special courses in the curriculum suited to local needs, and so on. We cannot understand how the demand for a higher salary

All agencies form
an integral part
of the Educational
system.

can be shelved on the score of the freedom of the management. Certainly no management will complain if the Government should undertake to improve the salaries of teachers by special grants. The freedom of management for which the Government seems to have a great regard, is unfortunately interfered with too often. Does not the Government interfere if the desk of a particular pattern be not got ready. Does it not interfere if the window of the regulation type be not used. Is it not interference, if the Government should issue a circular to the management that it should not allow the teachers to take up private tuition. Is it not interference if the Government should ask the management to impress upon the teachers that the school work should not be considered to be confined only to school hours and that the teacher should not take up tuition work out of school hours since it means expenditure of energy needed for the school work.

Is it interference if the authorities should convene a meeting of the managing bodies and place before them the difficulties of the teachers. Is it interference if the Government should of its own accord, insist on the adoption of a suitable scale of salaries as a condition of recognition of aided schools. If the Government expresses its inability to interfere, who will then interfere. The Minister's reply to the deputation of South India Teachers' Union does not make it clear as to how the management should be made to feel the situation. I do not think it can be the view of the Minister that the teachers should, instead of devoting their entire attention to the legitimate work of nation-building, be always considering representations and ultimatum to the management. We know that

What is expected of
the authorities.

Freedom of the
Management.

the Government has not cared to discuss the question of the salaries of teachers with the managing bodies, and to find out the ways and means. In none of the numerous public utterances of the Hon'ble Minister, do we find any appeal to the managing bodies, that the improvement of the condition of teachers is an urgent necessity. It may be expected of a responsible Minister that he will bring home to the public the importance of this question and suggest a solution.

What is the nature of the managing body which we are desired to approach by the Minister.

Nature of the Management.

The Minister himself seems to have no good idea about the managing bodies, if we should be guided by the remarks he makes during interviews. The Minister knows that, with some honourable exceptions, the managing bodies never worry themselves about the school affairs. It is a fact that most of the managing bodies are unable to help the school financially and they are only so many post-offices collecting fees and paying the teachers. The teachers have approached the management, and they are clearly told that there is no money and that they should appeal to the Government. How far is the management really interested in the cause of education may be judged from the fact that the indigenous managing bodies have not even thought of making a reference to the authorities in the matter of salaries. Certainly a deputation of managing bodies may compel the authorities to change their attitude but it will be long before a management begins to think about this matter. Members of many of the managing committees make no secret of the fact that the management is thrust upon them, and they are not slow to hint that they cannot be expected to

part with their cash or to go a begging for the sake of the schools. The indigenous managing bodies no doubt consist of eminent public men, several of whom are members of Municipalities, Taluk or District Boards, and Legislative Council. That public men are by no means anxious to work in the cause of education and to make even a slight sacrifice, should have, by this time, become clear to the Minister. Is it not an open secret that several local Boards have not sufficiently exerted themselves to start new elementary schools with the subsidies granted by the Government. Is it not a fact that the amount allotted for the spread of elementary education through the agency of local bodies, has not been utilised fully. How many of the municipalities have expressed their willingness to introduce the scheme of compulsory Elementary Education? Is it not the case that the Government is asked to meet the entire net-cost by some local bodies. Education has, it is painful to note, not received a favourable consideration at the hands of local bodies in spite of the provincial subsidies offered to them. It is for the Minister who cannot be a stranger to the conditions obtaining in this province, to chalk out a plan of action and relieve the distress of teachers. If really the Government cannot interfere, what is the alternative? Is education in aided institutions a matter of no concern to the Government? Will the Government contemplate with equanimity the existence of schools whose fitness and efficiency for effecting moral and mental improvement must sink beneath zero?

This non-intervention policy of the Minister is likely to be viewed by the teaching profession either as a convenient pretext for shelving the ques-

Request to the Hon'ble Minister.

tion or as an opinion formed in haste without due regard to the pledges held out in the resolutions of the Government of India. I am unable to believe that the Minister, personally so kind and easily accessible, should be inclined to evade the question. It may be that, with three big departments in his hands, he has not had the leisure to acquaint himself with the policy of education. My object in taking up for discussion this subject of educational policy is to place the view before the Minister that the State has pledged itself to aid private bodies adequately and to exercise a control over them. I hope that the Minister will act up to the spirit of the policy and earn the gratitude of the large body of teachers by making special adequate provision of teaching grants in the budget proposals that are being prepared.

Apart from considerations of the general educational policy and apart from the peculiar circumstances of the province,

Facts and Figures.

there are certain outstanding facts in the educational system at the present day which demand direct action on the part of the authorities. The number of Arts Colleges under private management is 26 against 10 under Government management (Administration Report 1920-21). Out of 7,580 pupils in the Arts Colleges, 5,770 receive their instruction in aided colleges against 1810 pupils in Government colleges. The provincial revenues contribute roughly 6½ lakhs to the total direct expenditure of 18 lakhs on collegiate education, and out of this 6½ lakhs, a sum of 5 lakhs is spent on Government colleges. The remaining lakh and a half represents the teaching grant to aided colleges. Fees amount to 8 lakhs and endowments, etc., indicating local effort, which in Government institutions

is negligible, amount to 3½ lakhs. Thus the sum of 3½ lakhs raised from private sources is double the teaching grant to aided colleges. Is there any need to emphasize the claims of the aided colleges to special consideration. The case of the secondary schools is no less strong. There are 467 secondary schools of which 17 are under Government, 29 under Municipalities, 148 under Taluk or District Boards and 273 under private management. Out of 15,2404 pupils, 5,441 attend Government schools, 11,162 Municipal schools, 26,047 Board schools and 1,09,754 the privately managed schools. The total direct expenditure on secondary education is roughly 57½ lakhs and the provincial revenues contribute only 11 lakhs or 19%. This sum of 11 lakhs is distributed as follows:—A lakh and three-quarter is spent on Government institutions, a lakh on Municipal schools, 3 lakhs and a half on Board schools, and 4 lakhs and a half on privately-managed schools. While the contribution from the provincial funds as the teaching grant to privately-managed schools is only four lakhs and a half, the total direct expenditure in these schools amounts to 39 lakhs. Thus the teaching grants meet only 11.5% of the expenditure in private secondary schools. Subscriptions, etc., forming local effort amount to eight lakhs and a half which here again is double the Government teaching grant. The Director of Public Instruction seems to be living in a world of his own, and he is never tired of asking the headmasters to raise the school-fees. He must have known that fees have been raised in most schools. Yet nothing can be done towards improving the salaries. Owing to the very sympathetic administration of the Grant-in-Aid Code, it happens that an aided school will, in all likelihood, get less

grant from the Government when it simply raises the fee income. Since the increase in fee income gained by levying fees above the standard rate is not, in spite of numerous representations, considered as a contribution by the management, and since few managements can ever think of meeting half the cost involved in the raising of the salaries, from their pocket, the teachers can, under existing circumstances, never hope for any remedy. Will the authorities care to remember that fees cover 60.6 per cent. of the total direct expenditure on secondary education, and that local effort meets nearly 14 per cent. In the face of these facts, will any one think of contending that aided schools cannot reasonably expect the Government to come to their help. The Government ought, in fairness to the aided schools, and also in the interest of sound education, to extend generous help of their own accord, to the aided schools.

But the eclectic educational activities of the Hon'ble Minister do not augur well for the secondary education in general and for aided schools in particular. He has taken the retrograde step of cutting down the scale of salary sanctioned by the Legislative Council, to School Assistants and Sub-Assistant Inspectors. Is it intended to put a stop to the demand for an increase of salary by teachers in aided schools and in Municipal and Board schools? If this step is necessitated by retrenchment policy, the future of the teaching University should be gloomy indeed. Of what avail will be the assurance of the Minister that the mofussil colleges need not have any fear that they will be neglected. It is not wise to play with education, and the new teaching university can hardly fulfil even

The Eclectic
programme and
prospects of
improvement.

the humble expectations of the Minister if the secondary schools are not also reorganised simultaneously and placed on a sound footing. Can an insolvent *ad hoc* Advisory District Secondary Education Board, the formation of which is under contemplation, really improve the situation which is too complicate even for the Minister. So much has been spent on the Secondary Education Reorganisation Committee, and we have yet to know its opinion. The Minister is crying himself hoarse with vocational instruction, and hastens to inform the representatives of teachers that he has made special provision for vocational instruction. The teachers have reason to fear that the funds badly needed for the improvement of aided schools, will be diverted to schemes which, though desirable, cannot be encouraged to the detriment of the existing aided schools. Will the Minister tell us how much of the amount ear-marked for vocational instruction has been utilised. Will the Minister care to find out how many schools have taken up the suggestion in spite of the wide advertisement. What has the Secondary Education Committee to say on vocational instruction? Will the Hon'ble Minister kindly care to inquire what amount provided in the budget for departmental expenditure lapses every year?

What with such eclectic programme, and what with the ever-increasing provision for Government institutions, direction, and inspection, it must happen that aided institutions, whose existence is cared for only during the compilation of administration report, will have to be closed, or worse still, will have to be allowed to continue their work in spite of their obvious incompetence. Many are the demands made

Own Child and
Strangers.

from various quarters upon the purse of the Minister and it is certain that in our Presidency the aided institutions will be overlooked in this scramble. Here is a pertinent criticism by the Government of India of a remark made by Lord Wenlock in the Legislative Council. "Lord Wenlock (Rev. Meston's article in the *Christian College Magazine*) said: It has been said with some truth, no doubt, that whenever it is a question of providing money for a Government institution, money is forthcoming; but that whenever it is necessary for other institutions, the reply is always unfortunately *non possumus*. If twenty-one people are knocking at the door of the Government for relief, who is the person that is likely to receive attention first, Government institution or what I may call strangers. Of the twenty-one, it is only natural that the Government should be a little more tender-hearted to its own particular child. But when its child has been fed, I think we may be able to extend our attention to the other twenty. This is surely not to make the improvement and extension of institutions under private managers, the principal care of the department." The spirit in which educational machinery happens to be administered in our Presidency continues unfortunately to be still the same, the Simla cry notwithstanding.

In view of the dominant position the aided institutions hold by virtue of number in the educational system of this Presidency, in view of the solemn pledges held out in the resolutions of the Government of India, in view of the fact that the educational progress depends upon the generous help extended to the aided schools, whenever necessary, and also in view of the abnormal conditions

Conclusion.

created by the War, which have caused anxiety to the managing bodies, the Hon'ble Minister of Education will be pleased to consider first the case of aided schools and to make special adequate provision in the budget, ear-marked for the improvement of the salaries of teachers.

The President then called upon the members to express their opinions. Mr. Sundararaja Rao congratulated the opener of the debate, and stated that the statistics mentioned by the opener would speak for themselves. Mr. K. A. Viraragava Chariar referred to a time when members of the teaching profession were not satisfied with the institutions managed by the Committees. He said that the Government were made to consider seriously the question of transfer of schools from the private management. He felt that the aided schools certainly deserved better treatment at the hands of the Government. Mr. Ramanujachariar considered that the reference to a commercial concern in the reply of the Hon'ble Minister was rather unfortunate. Also the idea of organisation to fight the management would, he said, spoil the interest of education. Mr. S. K. Yegnanarayana Aiyer wished that the responsible gentlemen at the helm had such a passionate desire to further the educational progress of the country as was to be seen in the Rt. Hon'ble Fisher who found it possible in times of financial stringency, to make adequate provision for education. Even the Russian Bolsheviks are seen to be alive to the welfare of children and to the necessity for their sound instruction. Mr. P. A. Subrahmanya Aiyar regretted that the managements did not join together and make a representation to the Government for special grants. Very few managing bodies are anxious

avail themselves of any opportunity of help the Government might offer. As matters stood, he said that the teachers alone had to cry and that, unless the managing bodies exerted themselves, any improvement could hardly be effected.

The President in his concluding remarks considered it would be no interference at all if the Government should insist on a suitable standard scale as a condition of recognition. He referred to the adoption of a Standard Fee Rate for the calculation of grants. He was sorry that the managing bodies were indifferent and he would desire that they should make a joint effort.

The following two Resolutions were then unanimously carried:—

(1) The "Madras Teachers' Guild" views with grave concern the opinion which the Hon'ble Minister of Education is reported to have expressed to a deputation of the South India Teachers'

Union that waited upon him recently, viz., that it would be ordinarily difficult for the Government to interfere with the management in respect of the salaries of teachers in Aided Secondary Schools, and the Guild once again urges that the Government which has laid down restrictive regulations with regard to the management of the school and stringent rules in respect of the conduct of teachers in Aided schools, should also see fit to fix in the interest of efficiency suitable grades of salary to teachers in Aided Secondary Schools, and also to insist on their adoption in all aided schools, as a necessary condition of recognition.

(2) The "Madras Teachers' Guild" requests that the Hon'ble Minister of Education will be pleased to consider the representations of teachers in aided schools for the immediate improvement of their salaries favourably, and to make an extra provision as teaching grant in the budget proposals for 1923-1924, of a sum of not less than 7 lakhs of rupees, ear-marked for the salaries of teachers in aided schools.

INTERMEDIATE EXAMINATION, 1923.

SELECT ESSAYS

FROM

ADDISON'S SPECTATOR

CHIEFLY THOSE RELATING TO SIR ROGER DE COVERLEY

EDITED WITH INTRODUCTION AND NOTES

BY

E. H. ELLIOT, B.A.

late of the Presidency College, Madras.

Price Re. 1-12-0. Charges extra.

THE TEACHING OF ENGLISH IN THE LOWER CLASSES

BY

MR. S. JAGANNADHAN,

Assistant, Teachers' College, Saidapet.

INTRODUCTION.

Our Outlook:—Whether at all English is to be one of the subjects of instruction in an Elementary School is the first point to consider before taking up the question of the method of imparting instruction in the same. At the outset the following questions demand scrutiny and answer:—

(a) How far has its lack of understanding prevented the Indian child in his village?

(b) How far does the present condition of the progressive industrial evolution of our country necessitate the learning of this foreign tongue?

(c) If it does, does it necessarily follow that the teaching of this subject should be included in the compulsory subjects of instruction in all Elementary Schools?

(d) And, how should the method of teaching be adapted so as to give its recipient the most practical and utilitarian value of learning this foreign tongue, having in view the condition and circumstances under which he is educated? (i.e. the village, the parents, the village school-master, his taste, qualifications and enthusiasm.)

In a way the answers to the above questions may be given straightway. To the first it may be answered that he has not been much handicapped within the sphere of the village without the knowledge of English. This does not need much argument. We may just note how an average man, say any workman, farmer or landlord conducts his business to the satisfaction of the villagers.

As for the second and third questions, we may say that in so far only as the modern urban tracts are concerned, is there a necessity for the acquisition of this language, a language which has become a world-language altogether? This will serve a greater extent of benefit as it enables one to enlarge the scope and result of his activities by its application in current affairs. This is the mother-tongue of our rulers, the language of our courts and adopted as a common language by the nations of the modern world in commerce and communication of news. The teaching of English, therefore, may have far greater aims such as the understanding and assimilation of the literature and science of the Western peoples; but they are, however, beyond the reach of the Elementary School-master at least for sometime to come.

Now for the fourth question, there is of course found a wide gulf of difference between a villager and a townsman. Children of urban tracts have more of English surroundings than those of rural areas. Percival Wren in his Discourse on the Teaching of English observes: "The very best way to teach an Indian boy English would be to take him to England..... Since we cannot take him to England the next best plan is to bring England to him. In other words to reproduce English conditions in the class-room and let him hear nothing else but English in his English lesson as far as possible." This remark holds good not only in the teaching of English but in all foreign languages as well. Hence there is bound to be a wide gulf of difference between the methods and products of teaching as adopted in the villages on the one hand and the towns on the other. As for

example simple words such as the following find a common place in the homes of children in towns:—Hot, Cold, Nice, Sweet, Seabeach, Bazaar, Street, House, Door-number, Postman, Match, Game, etc. Hence any attempt at making the town-school and the village-school stand on a par would be surely found to be futile.

THE DIFFERENT METHODS.

In the teaching of English the following are some of the methods, the very names of which evoke both criticism and respect:—

1. The Direct Method, or the Reformed Method.
2. The Translation Method.
3. The one mid-way between the two.

The Direct method is now very often taken as the subject of keen criticism both in the class-room and on the platform. It is criticised from the standpoint of waste of energy and time on the part of the teacher and lack of clearness in understanding on that of the taught. But the earnest attempts of some of the enthusiasts in this direction, have, however, demonstrated the successful fruits of their labour at least in the lower classes. True it is they need very much the help of interpretation or more strictly translation in the children's mother-tongue which goes to add to the impressiveness of school lessons. Provided that the teacher's commonsense and discretion keep him from overmuch of voice-training, imitation action and round about 'Direct' explanation, the above method may be applied.

VOICE-TRAINING.

In classes learning English by the Direct Method there is bound to be some occasion, when we have to give children some drill in voice-training and the need is all the

greater in the first year course in English. For example we take the word table (teibl). Here the children have to grasp the sounds *ei*, *b* and *l*. Taking Tamil to be the mother-tongue of the children the teacher will have a little difficulty in making boys get at the right pronunciation. The sounds *ε*, *ʃ*, *f*, and others of the like have to be drilled in the class-room. Any over-doing is very often viewed in the light that the English class is only a place for noise-making and something of the like. Apart from all these much depends on the right kind of imitation. The teacher has to talk to children very slowly and during the course of his talk the children have very carefully to observe his mode of talk (i.e.) the movement of the lips, tongue, etc. In the next year class children, when they begin to read, have to carefully listen to the teacher in his model reading and the teacher in his turn has to see that each child gets a chance of reading before him the lesson for the day. Some frame certain rules and show to children how different groups of words may be pronounced in one way and certain other groups in another way and again show the exceptions. With all the advantages of such a method one cannot exhaust all the words in a certain fixed number of groups. What is more, we do not aim at giving to children a certain number of rules to be remembered by them in learning the pronunciation. What applies to grammar applies to pronunciation also. For, in the teaching of grammar, modern educational theory is dead against giving any definition and framing of a set of rules. The method should be one of deduction and not induction. So much for voice-training.

Coming down to the actual methods we have taken the second one as the Translation method, otherwise spoken of as the "old method" by the reformers. The argument put forward in support of this method is this: "Has not this country produced gems brought up only under the old system?" Certainly this is a point worth being considered. But on the other hand the reformers contend that this hinders the rapid progress in conversation which the child can attain if it is taught by the "Direct Method."

In these circumstances, a method midway between the two (i.e.) taking in all the good features in each method and making them suit the conditions under which he is educated, is said to be the best. There is the goal and it has to be reached somehow more preferably by easy and safe means. In the first year's course, therefore, we aim at giving children an opportunity to talk in easy sentences.

At what psychological age of the child can the teaching of a foreign language be conveniently begun?—This is the point to be viewed by us carefully before we take up the question of the treatment of method. For a very long time past, English has been begun only in the present 4th class. In exceptional schools, they begin in the second class itself. The latter may seem an ambitious scheme inasmuch as the child's stay in the school was only a year and even then he had not received sufficient grounding in his mother-tongue. When he is on his way to get the required standard of training in his mother-tongue, will it not be burdening the child too much with the introduction of the teaching of a foreign language? Now there is a cry for imparting instruction in the vernacular

even in the High School classes in all non-language subjects. Thus, the traditional system of beginning English in Class IV is the best. Even in Class III if one could make an earnest attempt, it cannot be as successful as it would otherwise be if the same course be adopted in the next higher class. Surely one could make a beginning in Class III; but it has to be carried through very very slowly without any forced hurry to finish off a syllabus or a text-book. It is no doubt a father or a mother puts on an air of natural pride in seeing his or her child talk a few stray words in English which he may have picked up in school, play-ground or bazaar-street. But either for the sake of a few moments' pleasure on the part of the parents or as a piece of experimental work in respect to the teacher, it is in no way beneficial to the child to hinder him in his true psychological process of education by beginning to teach a foreign language when he lacks clear understanding and expression in his own mother-tongue. Because, "Nature is a strict accountant. If we demand of her in one direction more than she is able to lay out, she balances the account by making deductions elsewhere."

The Teacher:—In Elementary Schools where English is taught it would be too high an ambition to see the classes taught by an ideal teacher possessing the highest qualifications to teach a foreign tongue. Even this piece of work undertaken by the Elementary School-master is due either to his own inclination or the compulsion on the parents' side. The method that is being employed, will be one which may be termed either as the 'mixed method' or still better 'the teacher's own method.' In

respect to a system of voice-training for beginners, in explaining choice expressions, in introducing a variety of exercises in oral composition, he would, notwithstanding his enthusiasm and devotion to his work, exhibit himself very poorly if he expects to follow the footsteps of his colleagues with the maximum qualifications. Elementary School teachers have their own Associations and Meetings. It would be creditable then, if in such meetings, the presiding officer arranges for some model lessons in English by himself or by any one who has had ample experience in teaching the same in the preparatory classes. A short discourse on method may follow after such a lesson.

Duration of a period :—How long can one expect the beginners' class in the learning of English to hold conversation in the same? This has to be viewed in the light of the following :—First the very consciousness of the children that they are about to talk in English awakens in them a natural interest in the subject. The teacher should see to it that this interest is awakened and given free-play. The lessons being of a quite new character, the matter presented should be so little that it can be remembered the following day and this little has to be impressed in them. At the same time this should not become a burden both for the teacher and the taught by being made a matter of prolonged tension with little interest. Hence the first lessons need not extend to more than twenty-five minutes or half an hour at the most. The other part of the time is to be devoted to mutual questioning on the part of the pupils. The teacher may correct their mode of questioning, for, in children it is natural to question thus :—

1. "This is a table?" instead of, "Is this a table?" or "What is this?"

2. "I stand up" instead of giving the command "Stand up"
3. "This is green?" instead of "Is this green?"

The remedy would be to make them repeat the questions themselves during the course of the lesson and then see whether they do it right in the latter half of the period set apart for mutual questioning. In the higher classes the classes may be engaged in reading and writing or mutual questioning.

First lessons in English :—These are purely conversational and it will be a mere filling in of space and repetition if any attempt is made in these columns to chalk out the different types of questions and answers. The following books for boys and their respective teacher's books will serve as a good guide in the shaping of the teacher's lessons.

- | | |
|------------------------|-------------------|
| Reformed Readers. | ... J. A. Yates. |
| D.S. | ... R. W. Ross. |
| First Book of English. | ... T. O. Hodges. |

The following are some of the points which any one has to consider in the course of teaching :—

Only one type of question should be taken on a particular day and there should be thorough drilling in answering to the same. Variety of things should be presented to the class and the class as a whole on one or more occasions can perform the actions as jumping, sitting, standing, running, etc., while at the same time talking thus: "I am" or "We are jumping" etc., respectively. If for any type of question the teacher does not expect an answer it would not be inappropriate for him to tell the class in its vernacular that such and such a question brings out such and such an answer. This will smoothen the way. On some days, the classes may be held in the play-ground or under any tree or anywhere excepting the same class-room. This system may be resorted to after a three-months' practice in

English. Outside the class-room there may be found a sufficient number of natural objects on which the children's attention may be quickly drawn to, as for example, a dog running, some crows flying, a milkman going behind his cow, some cows grazing, a man with an umbrella in his hand, or any old woman slowly pacing her steps with a slender stick in her hand. Such out-door lessons are found to be more interesting to the children of the second year course. The use of coloured pictures is another interesting item of English study in the lower classes. The picture may be described in easy sentences, thus :—

The child is sitting on the floor. It has a book. The book is open. The child is looking at the picture. There is a horse on the floor. The horse is near the child, etc. Recourse to the vernacular should be had in explaining tenses, irregular plurals and the like. Stress has to be laid on types of questions as are shown below, till they are trained to different types of questions. These apply to the beginners' class as well as the next year class :—

- A. What is he doing? or What am I doing? What does he do? What do I do?
- B. What colour is this flower? What is the colour of this flower?
- C. How many books have you? How many books have you in your hand?
- D. What is there on the table? What do you see on the table?

The difficulty is this? Let us take for example the two questions in D. The answers to them would respectively be :—There is a book on the table; and, I see a book on the table. If the child should say in answer, "There is a book on the table" to the question "What do you see on the table?" the answer given though in good sense and correct sentence form, yet is not the intended answer for

that particular type of question. In the beginning, the children should be trained to give the correct types of answers for the respective questions put to them.

Just two months before the end of the school course, the children of this class should be given a certain amount of exercise in Reading and Writing. Reading and Writing should always go together and hence simultaneously attempted. This will lessen their difficulty in the next higher class. They should be able to write in copy-books legibly and neatly and first of all able to differentiate the printed and the manuscript writing. Writing need not necessarily be confined to copying a single line written by the teacher on the black-board. This traditional method of copy-writing should be adopted in the case of children of 7 or 8 years of age, more especially because these are quite new to the children who were all along been accustomed to writing in their vernacular. Some advocate vertical writing while there are some copy-books that adopt a slightly slanting mode of writing. Under such circumstances, better to dispense with printed copy-books and the children can best copy the teacher's writing. The first lesson in writing will be on the teaching of manuscript writing as opposed to print-writing. Then they can copy down words written on the board by the teacher. Double-ruling may safely be adopted in note-books and herein the children have to see closely the formation of letters, within the two lines, and again outside them, above, or below or both as the case may be, e.g.

s e a	... within two lines.
t	... above the two lines.
g	... below the two lines.
p	... above and below the lines.

b and l note the loops when you finish the b and w, which is otherwise absent in l and u.
 U and W In joining the next letter to the first letter in any word, learn to commence the second from where you left off finishing the first, as for example;

Ball; Label; Map

The writing of short sentences comes next. Children do not easily write the letters close together and the words a little apart from each other. Spacing should always be foremost in their minds when writing sentences and the teacher should see that they carry out this in practice during writing hours in the school.

*The Second Year Course, the year of transition and the introduction to text-books:—*Mere conversation in the preceding stages is now replaced by teaching through the media of a text-book. The text-book should first of all satisfy all the conditions necessary for bringing on the children to a certain stage at the end of the year. This transition has to be slow and steady and not sudden and haphazard. The previous year's course has to be gone through systematically and great attempt has to be made at Reading and Writing. The text-book serves a three-fold purpose, namely, of providing a plan to the teacher, of placing before the children sufficient and suitable matter for reading both in the school and at home and at giving some opportunity for the children's practical exercises. Under the last heading may be included chosen English Nursery Rhymes, short and interesting, dialogues which help children to hold conversation among their friends, picture-lessons that could help the children think about them in English and frame correct sentences describing them,

* (Indicate the positions when the next letter is joined to the previous one.)

short and interesting stories written especially for children, two or three specimens of letter-writing and stray exercises in sentence-formation. All these varying items do however appear in composition lessons. But in the year of transition such minor distinctions as oral composition, written composition, picture composition, recitation, etc., need not be made, and moreover only one text-book should provide the children specimens of these lessons. All these they go through in the hours set apart for English teaching.

Different sets of Reformed Readers for Indian Schools have been pouring in, in the educational mart of the present day, and there would always appear that each is lacking in perfection. The jump from the conversation stage to that of the text-book would always appear to be very high. The lessons have to be graded in order of difficulty and each should have only one definite purpose assigned to it. The introduction of too many new words in one particular lesson is a thing that a teacher has to look upon with dismay and difficulty. Another is this. To talk to Indian children on the manners and customs of the English, of depicting English sceneries, of describing English seasons, crops, birds, games, etc., is very often a matter of keen criticism and dispute. The ideas themselves are foreign to both the teacher and the taught and much strain has to be put on IMAGINATION over things unseen, unfamiliar and unheard of. There are two mental processes involved here, i.e., first of imagining a thing unknown and then of connecting the same with a foreign word. No doubt illustration can be had which will clear the difficulty to some extent. But will it not be better to present to children the things of his own native home in a foreign language thus clearing off one difficulty, namely, of imagination? This gives plenty of opportunity for the teacher to converse with children in foreign language on ideas

quite akin to them and to their nature. The birds they know of, the sceneries they have come across with or actually see and others of the like are much to be preferred to the former. Even in other subjects of the Curriculum such as, Nature-study, History and Geography, it is often said that plenty of room should be given to seeing, describing and talking about things more near at hand than remote.

*Vernacular:—*The vernacular must necessarily be brought in explaining any difficult situation in the lesson as the explanation of a word or a point of grammar. There is no place for the teaching of grammar as a separate subject in this class and whenever there is opportunity for bringing in the same it has to be introduced and clearly explained in the vernacular. The children may see for themselves the difference in and should thoroughly be acquainted with, the different types of questions and their respective answers. The latter procedure looks mechanical though, but it enables the children and the teacher to be more familiar with such types.

A. What am I doing?

What do I do?

What have I done?

What did I do?

B. Who is taller than Rama?

Which is the biggest of the three books?

Who is the fattest of the four boys?

We explain to them the time of actions in the above cases noted in A and give them plenty of oral exercises on each so as to give them a thorough drilling. Naturally in the first type they see the adding of *ing* satisfies the need, the repetition of the same word in the next fulfils the purpose and so on. Sometimes the question "What does he do?" makes children confused when especially this is put in the middle of a lesson on describing actions by the first and second persons, not-

withstanding their previous drilling in the former type. Here if the children had learnt and practised discriminating questions, the matter would have become quite easier and hence the need of laying of stress on any new type of question when especially this has to be introduced in the middle of any lesson which has another definite aim. A sudden deviation in questioning is likely to upset children and only gradually they learn to see the subtle differences. In the other two cases they note there is a change in the word denoting the action, i.e., the verb. The teacher notes these changes on the blackboard. These are to be copied, learnt and practised systematically by the children. "What did he do?" Here *did* indicates an action of the past. The children here have to be told in vernacular the rule they have to follow in answering to this type. Let them refer to the pages in the copy-book and answer this question. In a similar way they can note down comparative and superlative forms of adjectives after learning when and how to use them. A free use of the vernacular is deemed necessary in explaining the use of the comparative and superlative forms however much we may demonstrate them in the class with boys, pencils and other concrete materials. They ought to clearly see that the comparative is to be used when there are only two things and no more than that. The irregular plurals they copy in their copy-books on a separate page and make use of them in their actual lessons even if their memory should fail. In this way half the pages in the book has to be separately set apart for writing down such systematic exercises on grammar and only the other half has to be devoted to continuous writing from the blackboard or text-book by way of copy-writing.

A word of caution may be put in here to make the teacher's position in the class

clearer when he attempts, though unintentionally, to put the following and similar types of questions especially in this year of transition. (See Example A.) With two beads in his hand the teacher can frame the following different questions and try the same on any one day in the beginning of the year. Very often it has been found that they go wrong in giving the exact answers as each type of question and the corresponding answer to be elicited vary with the others. These may be tried as a test at the end of the year when he may reasonably expect the majority to answer them. If even then, they should fall short of his expectations he may give out the significance of these questions in the vernacular and obtain the necessary required answers.

Example A:—

1. What do you see in my hand?
2. How many beads are there in my hand?
3. How many beads do you see in my hand?
4. Where are the two beads?
5. How many beads have I in my hand?
6. Where have I the two beads?

Example B:—

1. What is the price of the book?
2. What is the cost of the book?
3. At what price does it sell?
4. How much does it cost?
5. What does it cost?

Treatment of any Reading Lesson.—The subject-matter of the lesson should be presented previously to model reading so that the child finds the matter understandable when he reads. The presentation should be through conversation only, the difficult words explained in the vernacular, the objects shown or told, or actions dramatised as the case may be. Such of the new expressions

that are new should be written on the black-board, their meanings learnt as shown previously and their pronunciation and spelling emphasised. Opportunity should be given for each child to read the portion taught, though not in the same day, at least in the next two or three days, thus devoting three or more days for each lesson. After reading, the teacher may question on the subject-matter. Mutual questioning may follow if time permits. But it should be one of the guiding principles for the teacher to set the children in mutual questioning twice or thrice a month when the teacher can watch their framing of questions and correct them whenever they go wrong. On some occasions they can be asked to write on black-board some of the difficult words picked out from the lesson thus giving exercises in spelling. It will also be a good idea if the teacher should try the same type of questions with anything else apart from the subject-matter learnt in the text-book. The subject, if capable of being dramatised, is worth while for the teacher to give it a fair trial. Buying and selling in the market, buying a post-card in the post-office are examples for dramatisation in the class.

Remarks as to pronunciation and spelling. (Vide my previous remarks on pronunciation). Great deal of difficulty is felt as regards these two especially because in this language the words are not written according as they are pronounced. There are ever so many modifications which have to be suggested if one attempts to frame certain rules as regards pronunciation. As for spelling, one has to do nothing but to pity the condition of spelling even in high school forms and it is but a puzzle for the teachers as to how best this can be remedied. And it is not very strange

that one has often come across with the saying, "Why not we retrace to the old way of dictation and memorise the spelling." The following procedure may however be taken up so as to give children correct ideas of spelling from the very beginning. The teacher pronounces the word very carefully while the children note the syllables and when the teacher writes the same on the black-board, they see the word, the syllables and eventually the letters, thus learning both correct pronunciation and spelling as Head-mas-ter; Tea-cher; Af-ter-noon; Wa-ter.

Another way suggested is the grouping of words where in a particular group such and such a letter produces such and such a sound, whereas in another group the sound is modified in another way, and lastly showing the exceptions. These will involve more of mental exercise which we can avoid with children. For example, let us take the letter C. It produces the sound of *k* in 'come', has the sound of *S* in 'Cell' and if followed by 'h' as in 'chair' it is changed into *tʃ*; even more difficulties may be suggested. But in so far as the children are concerned the best way is to observe the model pronunciation of the teacher and take the spelling of the words as they come by in order.

But as *Play exercises* we can do the following and similar ones taking care that we do not make too much of time out of them:—

I. Adding 'ing'.

(—ing.)	(t—repeated.)	(e—dropped.)
clean-ing.	hit-ting	come—coming.
go-ing.	shut-ting.	bite—biting.
light-ing.	put-ting.	write—writing.
wait-ing.		

II. Plurals:—

(Adding s.)	(Adding -es.)	(f-dropped—ves added.)
Book-s	Class-es.	calf—calves.
slate-s	glass-es	Half—Halves.
Pencil-s	watch-es	leaf—leaves.
pen-s	match-es	knife—knives.

<i>III. (gh—has t sound)(te has t sound)(t has t sound—)</i>		
light	kite	hat
weight	white	mat
height	bite	rat
right	write	bat

(NOTE:—Nos. I and II are expected to have been impressed in the course of lessons on practical grammar and written down in their copy-books.)

IV. (oo—produces the sound of u:)

moon—soon—noon—tool—stool—school.

V. (The suffix ther.):— Brother—Father—Mother—gather—weather.

2. *Dictation:*—Once a fortnight regular dictation exercise may take place. The children write to dictation first of all words from their text-book. After this is over, the teacher asks each boy to give out the spelling of one word and himself writes them on the black-board. The correction may be left to children themselves. They compare the words in their note-books with those on the black-board. During that time the teacher goes round the class to see their mode of correction, to get a general impression of the condition of spelling in the class as a whole and find out those who are very bad in it. These latter are to copy again the whole list from the black-board. The others correct the mistakes twice or thrice as desired by the teacher. Here again the children's writing should not be lost sight of. They should remember to begin each word with a capital letter and should as a rule adopt the manuscript writing to the printed one. Next they can write to dictation short sentences. This may after some time take the form of writing down answers to questions set to them on the

black-board, in which case they have to be very careful regarding the spelling of each word. Very often in such cases it so happens that the children commit mistakes in spelling of words which they see just before them on the black-board. Here the teacher can strike a note of warning to children.

3. *Writing.* (*Vide* remarks in previous columns). In this year of transition the children can copy the teacher's writing on the black-board, which may be a short continuous passage comprising easy sentences selected from their text-book. The children note the formation of each letter, the way in which one letter is joined to the next one, the spacing between one word and the next, the punctuation marks, etc. They should also remember to begin the first word in the next sentence with a capital letter. Writing should not proceed at the cost of spelling. Both are inter-dependent, just as Reading and Writing are. Thus it may be concluded that conversation, reading, writing, pronunciation and spelling are all to be kept in view in any English lesson. Such of the mistakes in the formation of letters and the spelling of mis-spelt words are noted in the margin by the teacher, which, the children should see they do not repeat the same again in the next writing lesson. Apart from these mechanical exercises in writing, the following are suggested as examples for writing lessons:—

A. *The cries of animals.*

The dog barks.
The crow caws.
The cat mews.
The horse neighs.
The cock crows.
The ass brays, etc.

B. *The names of workmen:—*

The carpenter makes a table.
The goldsmith makes bangles.

The milkman milks the cow.
The potter makes pots.
The shepherd drives the cattle.
etc. etc.

C. *Easy Nursery Rhymes:—*

1. Dickory Dickory Dock,
The mouse ran up the clock,
The clock struck one,
And the mouse came down,
Dickory Dickory Dock.
2. Handy Pandy, Jack a Dandy,
Loves Plum Cake and Sugar-candy,
He bought some at a Grocer's shop,
And out he came, "Hop, Hop, Hop."
3. Little Jack Horner,
Sat in a Corner,
Eating a Christmas Pie,
He put in his thumb,
And pulled out a Plum,
And said, "What a good boy am I?"

These exercises are meant to be written in that half of the writing book set apart for special writing exercises as shown under Grammar and Spelling. The finishing of exercises dealing with the past tense marks a stage in that class after which the above and similar other Nursery Rhymes may be taught to, learnt and memorised by children. After they have finished with the past tense, the lessons also may gradually increase in difficulty, and such of the lessons as are marked previously under the head of Text-book may be taken up one after another.

4. *Composition.*—This may otherwise be taken to be as the act of composing. Before a sufficient groundwork is made, the getting of composed or finished sentences from children will be a difficult task. This object is ever present in the teacher's mind in all his conversation, questioning on matter from the text-book, setting pupils at mutual questioning and other class exercises. These are certainly the preliminaries for preparing the boys for regular work in composition

exercises and as such this has to be postponed to a later stage still. The act of composing is based on the power of thinking and the development of the latter entirely depends upon the two factors, *viz.*, the degree of stimulation given by the teacher and the extent to which the topics centre round realities such as a coloured picture, a doll, attractive specimens of toys, short excursions, play, feeding of animals, observing people at work in and outside the school, etc. I have already mentioned that a specimen of each type of the above lessons should find a place in the text-book, and shall sketch briefly one lesson on each of the above types in a subsequent issue.

JUST READY—Part I-B—(D. Cr. 16 mo. 340 pp.)—Price Rs. 15. Charges extra.

TAMIL EDITION

OF

A TEXT-BOOK OF ARITHMETIC

FOR LOWER SECONDARY OR MIDDLE SCHOOLS

BY

The late S. RADHAKRISHNA AIYAR, B.A.
Principal, Maharaja's College, Pudukotah,

AND

K. VAIDYANATHASWAMI AIYAR, B.A.
Retired Headmaster, Board (now Govt.) High School, Tiruvalur.

Prepared on the lines indicated by the syllabus in **Elementary Mathematics** recently prescribed by the Director of Public Instruction, Madras, for Forms I, II and III.)

Part I for Class 5 and Form I.

Part II for Forms II and III.

Contents

XXX. ஓரினவகுத்தல் (முன்றும் பாகம்); XXXI. ஸராஸரி; XXXII. கவராசத்தாலும் அளவு சட்டத்தாலும் அளத்தல்; XXXIII. பெருக்கல் குறியை விட்டுவிடுதல்; XXXIV. அகூரங்கள் அடங்கிய உத்திகள்; XXXV. யோஜனைக் கணக்குகள் (முதல் பாகம்); XXXVI. வேண்டிய அளவுள்ள கோடுகளைக் கிழித்தல்; XXXVII. ஒற்றைப்படை எண்களும் இரட்டைப்படை எண்களும் தொடர்ச்சியான எண்களும்; XXXVIII. காரண எண்கள்: பகாசிலை எண்களும் பகுசிலை எண்களும்; XXXIX. காரண எண்களால் பெருக்கலும் வகுத்தலும்; XL. ஓரினப்பெருக்கல் (சுருக்கமான வழிகள்); XLI. ஓரின வகுத்தல் (சுருக்கமான வழிகள்); XLII. இனமாற்று; XLIII. பலவினவெண் கூட்டல்; XLIV. பலவினவெண் கழித்தல்; XLV. பலவினவெண் பெருக்கல்; XLVI. பலவினவெண் வகுத்தல்; XLVII. யோஜனைக் கணக்குகள் (இரண்டாம் பாகம்); XLVIII. புள்ளிகள்: கோடுகள்: பாப்புக்கள்: ஸரவிட்கள்; XLIX. கடைக்கணக்குகளும் வாடிக்கைக் கணக்குகளும்; L. வட்டம் (இரண்டாம் பாகம்); LI. துலாம்ஸ் பின்னங்கள்; LII. அலகு F ரொன்ச் நீட்டலளவைகள்; LIII. கோடுகளும் கோணங்களும்; LIV. கோணங்களும் அவைகளை அளத்தலும்; LV. அடுக்கும் அடுக்குக் குறியும்; LVI. அளவுகளும் மடங்குகளும்; LVII. கோணங்கள் வரைதல்; LVIII. அயல் கோணங்கள், எதிர் கோணங்கள் முதலியவை; LIX. உத்தம பொது அளவு; LX. அதம பொது மடங்கு; LXI. சதுரங்களையும் நீண்ட சதுரங்களையும் வரைதல்; LXII. பாப்பளவும் கன அளவும்; LXIII. பளான் வரைதல்; LXIV. சாதாரண பின்னங்கள்; LXV. பொருட் சட்டு சாதாரண பின்னங்கள்; LXVI. சமுச்சா என்னும் திசை காட்டும் கருவி; LXVII. Latitude and Longitude; LXVIII. ஒற்றமை தழுவிய முறை—பரிசுக் கேள்விகள்.

Part II (In preparation.)

SRINIVASA VARADACHARI & CO. TRIPPLICANE, MADRAS.

A NEGRO EDUCATIONIST OF REPUTE.

IT is common knowledge that America is the land of the rich and of the free. Worshippers at the shrine of Mammon envy her people; the mighty nations of other lands fear and respect her; her voice, hesitating at first but decisive afterwards, was the determining factor in the Great War.

Great as is her progress in the acquisition of worldly goods, no less glorious have been her victories in the cause of freedom but the greatest of her great deeds is the emancipation of the Negro race from thralldom and misery.

What that misery was and what that thralldom meant have been vividly depicted in the pages of "Uncle Tom's Cabin." Now the history of the sufferings of the Negro race is a thing of the past, thanks to American generosity.

Not only did America set free her slaves but she set them on their own legs; not only did she not allow them to drift for themselves but she came to their succour. The Negro has therefore good reasons to be grateful to Abraham Lincoln, General Armstrong and a host of lesser celebrities.

Here, we are, however, not so much concerned with America's help, generous though it has been; it is our object to sketch in brief the life-history of a Negro who has done much to uplift his race from its degraded condition, with the fond hope that his inspiring example may spur on some Indian youth to carve out a name for himself and work in the best interests of his country.

Now to the life of our hero. Born a slave and bred up as such, Booker T. Washington was still a boy when the order rang out that the

men. Our hero had a great mind to learn but there were no educational facilities for his race; he had to work for his livelihood as well. Thus forced by circumstances to throw himself on his resources, he practically taught himself as his work in a salt furnace demanded his attention from four o'clock in the morning till late in the evening.

Better times were, however, in store for the boy. One day he heard of the Hampton institute which had been opened for the education of his race, and he made up his mind to go there. But how could he command the sinews of war to go and study at an institution 500 miles away from his village? He took service in a white family and with the savings of a year and a half, he set out on a pilgrimage. Weary and footsore at times and always denied admission to the inn on account of colour prejudice and sleeping many a night in the open with the hard ground for his bed and with the firmament for a roof, Washington reached Richmond. Just, imagine, reader, what it means to sleep in the open in a country like the United States of America! Lest his limbs should become stiff and benumbed, he had to walk in the night to keep himself warm.

At Richmond, he found that his little store of money had all been exhausted; to continue his journey was impossible. So he took up work for some days and with the savings, he once again started. At length he reached Hampton and sighed a sigh of relief as if he was in sight of an oasis where he could quench his thirst for knowledge.

In due time, he presented himself before a teacher of the institution. His personal appearance which was not prepossessing and his educational attainments which did not speak much in his favour made the teacher

hesitate to admit him. On second thoughts, she asked him to sweep one of the class rooms. Washington did the work well; he swept the room three times; he then took a duster and cleansed every bit of wood-work and furniture in the room. The teacher came to inspect his work. She knew where to look for dust; she took her handkerchief and rubbed it against the tables, benches, etc.; nowhere could she find a particle of dust; with such thoroughness had the work been done.

With laurels, he came out of Hampton; he then took charge of a coloured school. He was here for nearly two years when a call came to him from his beloved Principal, General Armstrong, to join the staff of Hampton.

Not long after came Washington's opportunity to outshine many of his countrymen and to prove his usefulness to the world. He was asked to start a school for coloured people at Tuskegee in Alabama. In 1881, he opened the school with 30 pupils, mostly teachers themselves. The difficulties in the way were almost insurmountable. There was no money coming in either from the State or from the public; there was no body of opinion to encourage him in his up-hill work; there was no substantial building, no furniture, no equipment; there were few to co-operate with him; his very pupils were averse to take up work which he thought his duty to give them; manual work of any kind was distasteful to them; but with Washington, it was the very salt of his life; he believed that it would be his people's salvation. "Our greatest danger" he declared often and again, "is that in the great leap from slavery to freedom, we may overlook the fact that the masses of us are to live by the production of

our hands, and fail to keep in mind that we shall prosper in proportion as we learn to dignify and glorify common labour and put pains and skill in the common occupations of life; shall prosper in proportion as we learn to draw the line between the superficial and the substantial, the ornamental gewgaws of life and the useful." But the pupils thought more of Latin and Greek than of manual labour.

All this he had to change. A Herculean labour it was and he did his work exceedingly well as could be expected from a man who had high ideals of duty. At present the School of Tuskegee is a flourishing institution with 2400 acres of land and 111 substantial and impressive buildings—class-rooms, workshops, halls, offices and chapel—the property and endowment amounting in value to about one million sterling.

He did not confine himself to the building-up of a flourishing institute at Tuskegee; the farmers of the neighbourhood were encouraged to adopt better methods and to improve their knowledge of agriculture; he would go to the surrounding villages with his teachers and talk to the ignorant people on the ways and means of improving their condition.

His efforts have so far been crowned with success; he now occupies a unique position among the Negroes and is acknowledged as the sanest of their leaders. He has a world-wide reputation for his learning and for his social service. Such a man's outlook on life is worth knowing about. Says he, in speaking of life's difficulties and problems, in his book, *The Larger Education*: "Experience has taught me that no man should be pitied because every day in his life he faces a hard, stubborn problem, but rather that it is the man who has no problem to solve, no hardships to face, who is to be pitied. His misfortune consists in the fact that he has nothing in his life which will strengthen and form his character, nothing to call out his latent powers, and deepen and widen his hold on life."

Such, in short, is the life of one whose record of achievements can compare itself favourably with that of any other educationist, living and dead.

K. SRINIVAS KINI.

**REPORT OF THE REGISTRATION FEE
COMMITTEE APPOINTED BY THE
SENATE OF THE
CALCUTTA UNIVERSITY.**

We, the members of the Committee appointed by the Senate on the 26th August 1922 to consider the correspondence with the Government of Bengal regarding the enhancement of the fee for registration of students, have the honour to submit our report.

Section 6 of Chapter XV of the Regulations provides as follows :—

"On Matriculation, every student shall be required to pay to the University a registration fee of two rupees, when his name is sent in by the Principal.

No further fee for registration shall be charged, unless a student's name is, on non-payment of fees, absence without notice or expulsion, struck off the books of a College, in which case he shall pay one rupee to have his name re-entered in the University Register."

On the 4th December 1920, on the motion of Sir Asutosh Mookerjee, seconded by Mr. W. W. Hornell, the Senate carried *nem con* the following resolution :—

"That, subject to the sanction of the Government of India, 'five' be substituted for 'two' in the first paragraph of Section 6 of Chapter XV of the University Regulations."

Before the Minutes of the Senate could be confirmed and the resolution transmitted, under section 25 (1) of the Indian Universities Act, 1904, to the Government of India for sanction, the power vested in that Government was transferred to the Government of Bengal.* Consequently, the following letter was addressed to the Government of Bengal on the 11th April 1921 :—

From the Registrar, University of Calcutta, to the Secretary to the Government of Bengal, Department of Education, No. G-438, dated Senate House, the 11th April, 1921.

* The Government of India, in fact, intimated more than once during this period that "in view of the impending change in the agency for control over the University of Calcutta, they were transferring to the Government of Bengal matters sent up to them by the University for their consideration,

I am directed by the Hon'ble the Vice-Chancellor and Syndicate to request you to move the Government to sanction under Section 25 (1) of the Indian Universities Act the following change in the Regulations which has been unanimously adopted by the Senate :—

"That the word 'five' be substituted for the word 'two' in the first paragraph of Section 6 of Chapter XV of the University Regulations."

Section 6, as it now stands, requires every student who has passed the Matriculation Examination to pay to the University a registration fee of Rs. 2 when he takes his admission into an affiliated College. It is proposed to raise the fee to Rs. 5. This will give the University an increased income; it will not, at the same time, restrict the admission of passed students into Colleges. It is well known that there is keen competition among passed students to secure admission into the Colleges, and the Colleges are obliged to refuse admission in many instances from lack of accommodation. It may further be observed that the fee is payable only once during the whole career of the student, namely, when after passing the Matriculation Examination he seeks admission into a College. The small increase proposed is really insignificant when compared with the total expenditure which the student has to incur during the entire period of his College career.

No reply to this letter was received for several months, with the result that even if the proposal were sanctioned by the Government, it would not have been possible to apply the new rule to such students as would enter the Colleges after the Matriculation Examination of 1921. At length, the following reply was received on the 23rd September 1921 :—

From the Deputy Secretary to the Government of Bengal, Education Department, Education Branch, to the Registrar, University of Calcutta, No. 2113 Edn., dated Calcutta, the 22nd September, 1921.

With reference to your letter No. G-438, dated the 11th April, 1921, regarding the raising of registration fee from Rs. 2 to Rs. 5 in the case of a student who has passed the Matriculation examination and taken admission into an affiliated college, I am directed to say that the Government of Bengal (Ministry of Education) have not been able to come to a decision on the matter. Resolutions have been put down more than once on the subject for discussion in the Bengal Legislative Council,

but they have not yet been discussed, and until they are discussed and the sense of the Council known, Government are unable to deal with the question.*

2. The delay in replying to your letter is regretted.

This was communicated by the Syndicate to the Senate at the next ordinary meeting on the 10th December 1921.

The following further communication on the subject was received on the 20th December 1921 :—

From the Deputy Secretary to the Government of Bengal, Education Department, Education Branch, to the Registrar, Calcutta University, No. 2625 Edn., dated Calcutta, the 19th December, 1921.

In continuation of this Department letter No. 2113, dated the 22nd September, 1921, I am directed to say that the Government of Bengal (Ministry of Education) regret that they are unable to sanction the change in the Regulations proposed in your letter No. G-438, dated the 11th April, 1921.

This was placed before the Senate on the 28th January 1922, and was adjourned for consideration to the 18th February 1922, when, on the motion of Mr. Rama Prasad Mookerjee, seconded by Mr. Manmatha Nath Ray, the following resolution was unanimously adopted :—

"That the Government be requested to state the grounds for refusing to accept the recommendation to raise the fee for registration of students."

Pursuant to this, resolution, the following letter was addressed to the Government of Bengal on the 22nd February 1922 :—

From the Registrar, University of Calcutta, to the Secretary to the Government of Bengal, Education Department, No. G-312, dated Senate House, the 22nd February, 1922.

I am directed to acknowledge the receipt of your letter No. 2625 Edn., dated the 19th December, 1921, on the subject of raising the registration fee from Rs. 2 to Rs. 5 in the case of a student who has joined a college after passing the Matriculation Examination and to say that the letter was duly placed before the Senate, at their meeting held on the 18th instant. The Senate have desired me to request the favour of your stating, for the

* It should be noted that the resolutions were notified for discussion in the sessions of the Council commencing on the 4th July 1921 and the 29th August 1921, while the letter from the University was sent as early as the 11th April 1921.

information of the Senate, the grounds which have led the Government of Bengal to refuse to accept their recommendation in regard to the proposed raising of the fee for registration of students.

After the lapse of several months, the following reply was received on the 21st July 1922 :—

From the Secretary to the Government of Bengal, Education Department, to the Registrar, University of Calcutta, No. 1422, dated the 20th July, 1922.

I am instructed to refer to your letter No. G. 312, dated 22nd February, 1922.

2. It is one of the functions of Government in the Department of Education to deal with proposals for the alteration of University regulations, nor is it necessary that the considerations that influence the decision should be communicated with the decision. In the present case, however, Government is prepared to waive this consideration and to point out that the general public is interested in a peculiar degree in the University of Calcutta through which alone (with the exception of the Dacca University) young men of the educated classes must pass on their way to their future profession or calling, and the public through their representatives in the Bengal Legislative Council strongly indicated the opinion that the registration fee should not be raised, and that if it were raised the increase of revenue would be trifling in relation to the deficit that the University has to meet. This attitude of the public, Government has reason to believe, is connected with the view that the University spends too large a portion of its resources on the Post-Graduate Department, especially on the Arts side, and that the increase of fees of any kind will in the main benefit only that minority that has joined these higher classes. Government appreciates the enthusiasm with which the post-graduate departments have been developed, but cannot ignore public opinion on this point, and while reluctant to interfere with the liberty of action of an academic body, its unable to accept the principle that financial proposal made by the University should be approved as a mere matter of form. Government has to make decisions in the public interest, and in carrying out the responsibilities placed upon it in relation to the University must take into account public opinion on the matters at issue, as represented by the Bengal Legislative Council, and in other ways.

3. I am to add that the decision already communicated will not prevent further consideration by Government of any similar proposal if it is intended to utilise the additional resources on purposes beneficial to the majority of the students who pay the registration fee.

4. I regret the delay which has, owing to various reasons, occurred in replying to your letter,

The above letter was, by order of the Syndicate, placed before the Senate on the 26th August, 1922, and has led to the appointment of the present Committee.

It will be observed that the Government of Bengal maintain that the considerations which influence their decision with regard to proposals for alteration of the University Regulations should not necessarily be communicated along with the decision. It need not be disputed that Section 25 of the Indian Universities Act does not in express terms make it obligatory upon the Government to mention any reasons, when they withhold sanction to a regulation proposed by the Senate. It should not be overlooked, however, that ever since the foundation of the University, the Government of India made it a uniform practice to state the grounds for their action, in the event of their refusal to sanction regulations submitted for their approval under Section 8 of the Act of Incorporation, 1857, and subsequently under Section 25 of the Indian Universities Act, 1904. It is obvious that weighty arguments may be adduced in defence of the course followed by the Government of India. We need not emphasise that when the Government find themselves in disagreement with the Senate upon a specific recommendation, it would be at least courteous on their part to assign definite reasons in support of the view adopted by them, contrary to what has been held by a body of educated men who are presumably competent to be entrusted with the management of and superintendence over the affairs of the University. Such a course would be calculated to inspire confidence and respect, and would thereby minimise the chance of the question being raised, why the Government should at all be vested with final authority in matters of this description. The danger involved in a contingency like what has now happened was fully anticipated by the Calcutta University Commission, when in their report they made elaborate recommendations so that the proposals, which, under the existing system, were required to be submitted to the Government for sanction, might be decided by the University authorities them-

selves. Apart from these considerations, it cannot be overlooked that a full statement of reasons in support of such course as may commend itself to the Government is the most potent safeguard against arbitrary or erroneous action. This is well illustrated by what has happened in the present instance, and we are of opinion that in the interests of all concerned, the Government should, without reluctance or hesitation, communicate the reasons in the event of their refusal to sanction a regulation framed by the Senate under Section 25 of the Indian Universities Act. We must add here that we have not been able to appreciate the propriety of the remark that the Government "is unable to accept the principle that financial proposals made by the University should be approved as a mere matter of form." It is sufficient to point out that the principle which is thus repudiated has never been formulated by the University. But what the Senate may and should claim is that their recommendations ought not to be summarily rejected even without a statement of reasons.

The chief ground put forward by the Government in justification of their refusal to sanction the proposed change is that the additional income is likely to be applied to meet the expenditure on Post-Graduate Studies. Indeed, it is stated explicitly that further consideration, by the Government, of a similar proposal may be possible, if it intended to utilise the additional income "on purposes beneficial to the majority of the students who pay the registration fee." It may at once be observed that the letter from the University did not specify that the additional income would be spent for the maintenance of the Post-Graduate Department, and it is difficult to see why there should have been such an apprehension in the minds of the authorities. We shall return to this point later on; at this stage, we propose to controvert the proposition that the income derived from the registration fee, or, for the matter of that, any other fee, should be spent for the benefit of the majority of those who pay the fees. If the doctrine favoured by the Government were recognised in practice, the activities of the University, indeed, of all public institutions not excluding the Government of Bengal, would

have been completely paralysed. Each candidate for the Matriculation Examination, for instance, may on this principle well urge that he can be required to pay only just so much as is necessary for the conduct of his examination. If this were once conceded, it would follow, conversely, that every individual candidate should be called upon to meet all the expenditure incurred by the University for his benefit. To take an illustration, if there is only one candidate at the examination for the degree of Doctor of Medicine, and it costs the University five hundred rupees to conduct that examination, the entire amount should, in that case, be levied from him in the shape of examination fee. The University, however, has not hitherto recognized, much less applied, such a surprising doctrine. On the other hand, the entire University has been regarded as an entity, and the income, from whatever source derived, has been used for the maintenance of the institution as a whole. It cannot be possible that it is unknown to the Government of Bengal that under Section 45 of Chapter XI of the University Regulations, which were sanctioned by the Governor-General in Council, one third of the fees realised from candidates for the Matriculation, I.A., I.Sc., B.A. and B.Sc. Examinations is required to be spent on Post-Graduate Studies. Clearly, this is nothing but a form of taxation, which affects only those who manifest their interest in high education by presenting their wards as candidates at University examinations. The same method has been adopted in Lahore; the University of the Punjab has, with the sanction of the Punjab Government, raised the fees for admission into its examinations and has ordained that a portion of the increased revenue should be expended on the development of Post-Graduate Studies. We are glad to be able to quote the authority of even the Government of Bengal against the soundness of the theory that a person should pay only so much as is needed to give him the benefit he receives. The Government of Bengal have for many years past conducted, through the Committee of Legal Education, the Pleadership and Muktearship Examinations, and have made what would certainly be considered a huge profit, namely,

Rs. 4,92,094-12-0, during the entire period that the system has been in operation (1875-1921). We set out here the figures for recent years:

Year.	Receipts.			Expenditure.			Balance.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
1901 ...	22,480	0	0	10,882	10	0	11,547	6	0
1902 ...	23,540	0	0	11,115	14	0	12,424	2	0
1903 ...	26,530	0	0	12,088	9	11	18,446	6	1
1904 ...	26,050	0	0	12,518	7	4	18,586	8	8
1905 ...	27,820	0	0	12,823	6	6	14,996	9	6
1906 ...	29,120	0	0	18,817	7	1	15,802	8	11
1907 ...	32,580	0	0	14,797	0	10	17,782	10	2
1908 ...	30,560	0	0	14,494	3	0	16,065	13	0
1909 ...	36,115	0	0	16,780	5	8	19,884	10	9
1910 ...	35,285	0	0	15,299	6	6	19,985	9	6
1911 ...	40,660	0	0	17,516	4	8	23,043	11	4
1912 ...	42,440	0	0	17,894	7	0	25,020	9	0
1913 ...	34,435	0	0	16,667	6	6	17,567	9	0
1914 ...	28,290	0	0	11,440	8	0	16,849	8	6
1915 ...	23,520	0	0	13,711	14	0	9,808	2	0
1916 ...	24,845	18	0	13,887	13	0	9,958	0	0
1917 ...	16,010	0	0	12,566	7	0	3,443	9	0
1918 ...	14,035	0	0	12,071	7	8	1,963	5	9
1919 ...	14,165	0	0	12,429	13	0	1,785	8	0
1920 ...	16,880	0	0	18,877	0	0	3,453	0	0
1921 ...	19,890	0	0	13,709	9	0	6,180	7	0

It would be interesting to know whether the Bengal Government have set apart the excess amount every year and applied the sum "for the benefit of the majority of the candidates who actually paid the fees."

To take another illustration. The Bengal Government have for some time past conducted the Sanskrit First, Second and Title Examinations through the Board of Sanskrit Examinations, now called the Calcutta Sanskrit Association. Every year there is a balance left, which, during the last ten years, has accumulated "to more than Rs. 30,000. It would be interesting to find out whether the surplus has been kept apart from year to year and applied for "purposes beneficial to the majority of the students who actually paid the fees."

We may usefully recall, for purposes of further illustration—if, indeed, any further illustration is necessary,—recent incidents which must be still fresh in the minds of most people. The Bengal Government have, within the last twelve months, raised, by legislation, the fee payable by every

applicant for enrolment as a Vakil of the High Court, from Rs. 500 to Rs. 750. It would be interesting to ascertain whether this additional revenue will be utilised for "some purpose beneficial to the majority of those" who will be subjected to the payment of the enhanced fee. The Bengal Government have, again, by legislation, substantially enhanced the amount of Court-fee leviable on plaints, memorandums of appeal and other legal documents. We have not yet learnt that the additional revenue raised from this source has been directed to be set apart "for purposes beneficial to the majority of" the litigants who will be compelled to submit to the new taxation—we are not even sure that the amount will be spent towards the improvement of the judicial administration of the Presidency.

These illustrations—they can easily be, but need not be, multiplied—make it abundantly clear that the position taken up by the Government is thoroughly unsound. Institutions which serve society on an extensive scale and whose functions are inevitably of a complex character, cannot be disintegrated into distinct and self-contained fragments. In addition to this, the question of the registration fee stands in a manner by itself. The registration fee, as is made plain by the Regulations, is paid by a student after Matriculation, because by taking admission into a College he becomes a student of the University; see Chapter XV, Section 1. The fee is levied but once at the beginning of his career and is his contribution to the University chest in his character as a student of the University. On no conceivable principle can it be suggested that this contribution must be utilised "for some purpose, which is beneficial to the majority of the students." After all, the University is one homogeneous whole, and the guardian of every student, who after Matriculation becomes a student of the University, may rightly and legitimately be called upon to contribute, in however small a degree, to the cost of maintenance of the institution of which his ward desires to become a member. But, apart from this it must be remembered that students of all

grades are benefited by the existence of a strong Teaching University, which, amongst the various functions it has to perform, promotes a constant and an abundant supply of well-trained graduates in order to staff our schools and colleges. We cannot, in the field of education, draw arbitrary dividing lines and create self-supporting compartments. We need not labour this point further, because it has not been suggested by the Government that the addition of the extra three rupees, proposed to be charged once during the whole career of a boy, will prove to be too heavy a burden on his guardian.

We have already pointed out that the letter from the University did not set forth that the additional income would be spent on Post-Graduate Studies, much less "especially on the Arts side." The letter from the Government gives no indication why the assumption has been made that the money would be so applied. On the other hand, the Proceedings of the Senate dated the 4th December 1920 show that the resolution was adopted in connection with the Budget Estimates for 1919-20. Post-war conditions had led to considerable increase of expenses in the general department of the University, and in view of the narrow margin of the receipts over the expenditure, it was considered necessary to add to the income. The University is unquestionably not the only institution which has been hit hard by post-war economic conditions, and while almost every institution has taken steps to increase its revenue—not excluding the Government of Bengal—every effort on the part of the University to augment its income by small rises in the fees charged has met with nothing but obstruction. But even if it be assumed that a part of the additional receipts might have been spent on Post-Graduate Studies, surely that should not furnish a reasonable ground for complaint. We regret to note that the tone of the Government letter, taken as a whole, is likely to create the impression that the opinion is favoured that the Post-Graduate Department is a wasteful, if not an undesirable luxury, and that the activities

of the University in that direction should be hampered, if not restrained. We do not feel sure whether such a view is actually held by responsible members of the Government, though an affirmative inference to that effect may not improbably be drawn by many from the adverse decision of the matter under consideration; in any event, it is beyond doubt that the opinion is attributed to members of the Bengal Legislative Council and also of the public. We are gratified, however, to read that "the Government appreciates the enthusiasm with which the Post-Graduate departments have been developed" although we recognize that this can afford little encouragement to those, who have to carry on the work under great financial stringency and not unnaturally look forward to something more fruitful than a generous compliment.

We do not suggest that public opinion, when based upon an intelligent and impartial survey of all the facts, should be disregarded. We are unable at the same time to overlook that all the members of a popular assembly cannot, under existing conditions, be expected to form a correct estimate of the importance of a system of Post-Graduate instruction and research, which has been described by the University Commission as "setting new standards of method in University teaching." In these circumstances, we cannot but feel that it would be a real source of danger to the development of the highest type of University instruction and research, if the Government allowed themselves to be guided by the opinion expressed in a popular assembly on such a subject. With characteristic emphasis did Lord Curzon assert that "higher education ought not to be run by politicians or amateurs." It is, indeed, undeniable that the majority of the members of such a popular assembly in this country have never known a University except as a machine for the conduct of examinations. To them the University means nothing more than the final stage in a long and irksome series of examinations in which they were engaged from their boyhood—not that they should be blamed for their dreary experience, for it is only during recent years that the ideal of a Teaching and Research University has begun to materialise in Calcutta. It would not be a matter for surprise if men so situated, often without sufficient data at their disposal to enable them to form a sound and discriminating judgment on academic matters, should be tempted to regard a University as an

institution which simply furnishes an avenue to a profession or a calling.

Before we leave this topic, we cannot but take notice of the reference made in the Government letter to hostile public opinion on Post-Graduate Studies. We frankly admit that we do not appreciate why weight should be attached only to such criticism as is unfriendly to the University. Public opinion on the subject has by no means been uniform, and it is interesting to note that the most recent pronouncements in the Press have been markedly in favour of the continuance of Post-Graduate study and research in the University. If the present organisation has failed to appeal to the intelligence of the representatives of a section of the local Press or that of a number of unenlightened politicians, it has, at the same time, readily been recognised by critics, competent and impartial, as a national asset, having given "scope to intellectual freedom and stimulated a degree of intellectual curiosity and activity, unprecedented in the history of this, or any other Indian University."

It is not in every instance we find that the Government have felt themselves fettered by the opinion expressed by the Bengal Legislative Council; it will be within the recollection of all the members of this University that the Bengal Government refused to sanction the proposal made by the Senate for the reduction of the Matriculation age-limit, notwithstanding the fact that the Council had expressed a decisive opinion in favour of even a more radical course, namely, the entire abolition of age restriction. These instances only serve to accentuate the paramount need for the direct representation of the Senate on the Bengal Legislative Council, and we are in entire agreement with the recommendation made on this subject by the Committee of the Senate, appointed on the 25th March 1922 whose report has already been approved by the Senate.

After a careful consideration of the grounds set out in the letter from the Government of Bengal, we see no escape from the conclusion that they do not justify the refusal of the proposal made by the Senate.

ASUTOSH MOOKERJEE
NILRATAN SIROAR
J. R. BANERJEA
HIRALAL HALDAR
GEORGE HOWELLS

20th Oct. 1922.

EDUCATIONAL TOPICS.

Standardised Educational Tests.

Mr. B. J. Rockwood, writing in *The Christian College Magazine* (April, 1922) says that the great need in educational circles to-day is some acceptable system or method of standardised measurements and units of accomplishment for determining the kind and amount of work which our schools are doing. He takes up the study of some standardised tests, and first deals with arithmetic which requires on the part of boys specific arithmetical habits or responses. Their significant characteristics are the rate or speed of performance and the accuracy of the response. Thus, the measurement of arithmetic-abilities in these fields involves determining only at what rate a pupil is able to do examples of the elemental types, and how accurate his answers are.

There are several forms of tests to measure these specific abilities. We may have a test composed of several examples based on each type or ability or we may have a test consisting of a limited number of examples covering the whole range of abilities. This last would be a survey test and would be diagnostic in that it would show in what abilities a pupil was weak.

The reason for making these measurements is to secure information which will be helpful in making instruction more effective. By making these measurements we are able to locate the weak pupils and find out in what phase of these fundamental abilities they are failing. Some pupils will be found to be speedy and accurate, some slow and accurate, some will be strong in all but some special ability, e.g., multiplication with ciphers in multiplier, etc. The teacher's problem is to adapt instruction so as to strengthen the various pupils in their varying weaknesses. This may involve individual instruction or the use of some teaching device, of which there are many. With most pupils these operations are not automatic.

Besides examples in these fundamental operations there are also problems involving judgment as to what operations are to be performed, e.g., 4×8 is a simple example the solving of which should be automatic; but the problem, "If one pencil cost four cents how much would eight pencils cost?" involve

ess a decision as to what method is to be employed whether multiplication or addition. The ability to solve problems involves knowledge and reasoning power and is not a specific habit.

The problem of measurement in reading differs in certain important respects from that in arithmetic. There are different tests of oral reading and silent reading. The following are some of the uses resulting from the application of these tests:—

But one of the greatest uses of these tests is found in improvement of teaching efficiency. Not only do these tests show the teacher what standards he ought to attain but they also show him on what he ought to lay the emphasis in teaching. He will not spend much time on the causes of the whiskey rebellion when he finds that this rebellion is not mentioned in the tests.

The teacher's efficiency is also increased by the fact that they make it possible for him to locate his weak pupil and even delve deeper into the weakness by finding out in what phase of the work the pupil is weak. We have in mind a school in Columbus, Ohio. The teacher had several very backward pupils in Arithmetic. These tests were given and some of the pupils were found to be weak in the fundamental operations, some failing in one phase of the work and some in another. Each pupil was taken privately by a spare teacher and given the examples to work and the teacher observed him as he worked, and in each case it was found that some peculiar misconception was causing all the trouble. When the subject was taught in the class, the group got the idea but this individual pupil got it wrong and never had his error corrected. Thus these tests are diagnostic of school ills and a knowledge of their composition gives the teacher the clue to a discovery of the cure.

There are many such helps to be found in their use. They must be given a hearty trial to be appreciated. But the last help we shall consider is that relative to promotions. At present promotions are based on size of pupil, age of pupil, and what not. We say we promote on examinations but that is camouflage. Personal opinion and bias predominate in such decisions for they pervade the marks given and also the precision with which we apply our promotions scale. But with standardized tests promotion becomes scientific. When a pupil can pass the tests of his form he is promoted and the test in a standard one, not one gotten up for him,

The Great American Bill of Education.

The now-famous Smith-Towner Bill, which failed to pass under the last President's administration, has been re-introduced into Congress, modified in certain respects. We take the following features of the Bill from the current number of *The Journal of Education and the School World*:—

This Bill, now known as the Towner-Sterling Bill, has been characterized as the most important and most comprehensive educational measure ever presented to the Congress of the United States. It embodies two fundamental provisions: the creation of a National Department of Education with a Secretary of Education in the President's Cabinet at its head, and the authorization of annual national appropriations totalling one hundred million dollars to aid and encourage States in the promotion of education. Thus, the two fundamental underlying ideas are: a National Secretary of Education, and the equalization of educational opportunities through Federal aid. The proposed annual appropriations are to be apportioned among the States for the following purposes:—(1) \$50,000,000 to encourage the States in the equalization of educational opportunities, and for the partial payment of teachers' salaries, providing better instruction, extending school terms, and otherwise providing equally good schools for all children; (2) \$15,000,000 to encourage the States in providing facilities for preparing and supplying better teachers; (3) \$20,000,000 to encourage the States in the promotion of physical and health education and recreation; (4) \$7,500,000 to encourage the States in the removal of illiteracy; (5) \$7,500,000 to encourage the States in the Americanization of foreigners.

The foremost educational experts in the United States were called into service in drafting the Smith-Towner Bill. The names of Coffman, Bagley, and Strayer alone would be a sufficient guarantee of a Bill formulated in conformity with the soundest principles of school administration and public finance. By the Constitution of the United States, the control of education is a power reserved to the States. The Towner-Sterling Bill recognizes this,

XXVIII—101

and preserves State autonomy and State control. The appropriations are to be allotted to the States on condition that the State or its local school corporations, or both, shall furnish an equal amount for each specified purpose. The control and administration of education is left entirely to the States and to local authorities, the National Government exercising supervision only to the extent necessary to see that the several amounts appropriated are used by the States for the purposes specified in the Act. It is, however, in the determination of the bases upon which the various total grants are to be divided among the States that the scientific knowledge and judgment of the formulators of the Bill are most evident.

Any State's quota of the grant for teacher-training is to be determined upon the basis of the ratio of the total number of persons teaching in the public schools of that State to the total number of public school teachers in the United States. The grant for equalizing educational opportunities is to be apportioned among the States, one-half on the foregoing basis, and one-half in the proportion which the number of children between the ages of six and twenty-one in that State bears to the total number of such children in the United States. The grant for physical education and recreation is to be divided among the States in proportion to their total population. The grant for removal of illiteracy is to be divided upon the basis of the proportion of total adult illiterate population of the United States residing within the respective States. The grant for Americanization is to be apportioned among the States upon the basis of the proportion of the total foreign-born population of the United States residing within the State.

No educational Bill has ever attracted more widespread attention in the United States. The arguments for its passage are neither academic nor hypothetical; they are, rather, definite and concrete situations and conditions. The first selective draft revealed that there were in the United States no less than 700,000 illiterate males between the ages of twenty-one and thirty-one. Again, it was found that more than 700,000 of the men examined for military service were physically unsound, and that a large proportion of the defects discovered could have been prevented or at least remedied by proper

attention in youth. Equally convincing were the revelations made, which argued for national subsidies for Americanization, for teacher-training, and for equalizing educational opportunities.

In support of the demand for a National Department of Education, emphasis has been placed upon the fact that at the present time such federal administration of educational affairs as exists is parcelled out among more than eighty different bureaux, boards, and divisions of the several departments of the government; that the Bureau of Education is almost entirely excluded from performing any national educational services other than collecting statistics and disseminating information. In other words, it is prohibited by its very organization and subordinate position, as well as by its meagre budget, from exercising the leadership which should be exercised by the agency representing the national government in educational affairs.

The Progress of Education in the Bombay Presidency.*

The Report on Public Instruction for the year 1920-21 shows a record of steady progress in spite of the tremendous efforts that were made by the Non-Co-operation Party to induce parents to boycott Government schools. The number of schools increased by 251 and the number of pupils by 43,117, although 14 secondary schools and 25 primary schools non-co-operated, and 576 students withdrew from colleges and 1,684 from secondary schools. A considerable portion of these, however, returned after a short while.

The number of pupils receiving instruction in the 13,718 public institutions in the Presidency is 9,05,000. Including private schools there are 9½ lakhs of pupils receiving instruction in the schools and colleges of the Presidency, of whom 7,60,000 are males and 1,89,000 females. Out of every 1,000 of the male population 71 boys and young men are receiving instruction, the corresponding figure for the female population being 20.

The total expenditure on education from all sources increased from 235 to 263 lakhs of rupees.

* Extracted from *The Mysore Economic Journal* for July, 1922.

and the share of this expenditure, borne by Government increased from 54 per cent. to 57 per cent. As the provincial expenditure of 127 lakhs in the previous year rose to 150 lakhs it is clear that practically the whole of the increase was met by Government.

It is interesting to note that the expenditure from Provincial funds represents taxation of about 12 annas a year, or one anna per month per head of the population of the Presidency.

In the sphere of primary education which must always be the first concern of Government, there was a very considerable advance. The number of primary schools increased by 300 to 13 thousand, and the number of pupils in them from 7½ to 8 lakhs. The increase was shared by all classes of primary schools, and took place in all divisions of the Presidency except in the Northern Division which was more exposed than other areas to the blighting influence of the Non-Co-operation movement. Even there the number of pupils increased, though not to the same extent as it might otherwise have done.

The Provincial contribution to this branch of education rose from 61 to 70 lakhs of rupees mostly distributed in the shape of grants to Local Boards and Municipalities, and amounted to 66 per cent. of the total expenditure on primary education in the course of ten years the cost of educating a pupil in a primary school rose from Rs. 8 to Rs. 16 and Government's share of this form Rs. 4 to Rs. 10. For all practical purposes primary education was free, as no child was kept away from school on account of inability to pay fees; 43 per cent. of the children in Local Board schools in fact paid no fees at all, and the total fee collections were only 4 per cent. of the expenditure. In all Government and Local Fund primary schools girls were admitted free.

The question whether even those who can pay should now be given primary education at the cost of the State, and whether it should be made compulsory, is being considered by a Committee appointed for the purpose.

Secondary education was naturally more affected by the Non-Co-operation movement, and the total number of secondary schools decreased by 65 to 475, the number of pupils going down from 82,000 to 76,000. The progress of secondary education has for some time been hampered by the low rate of fees

charged in Government schools, seeing that private persons, who might otherwise have started schools, have found that it would be impossible to keep up any adequate staff from the fee receipts and the usual grants-in-aid.

Ten years ago the cost of educating a pupil in a Government secondary school was Rs. 52 out of which Government paid Rs. 19. In the year covered by this report the cost had risen to Rs. 81, out of which Government paid no less than Rs. 51. This defect has been recently remedied and the scope for private enterprise materially increased in consequence.

The progress of Mahomedan education was on the whole satisfactory; this community forms about 20 per cent. of the population of the Presidency and the number of Mahomedan pupils under instruction was also 20 per cent. of the total number of pupils. During the war the education of Mahomedans in Sind suffered a considerable set-back, but the lost ground was more than recovered in 1918-19, and since then progress has been more rapid.

Vagaries of Marking.

The supposed vagaries of examiners and the evils of their careless marking evoke complaints not merely in our country, but even in England also; and a leading note in the last issue of *The Journal of Education and School World* gives one an idea of the state of affairs in connection with the London Matriculation.

Those who are acquainted with the procedure adopted in marking the papers know well that such accusations must be entirely groundless unless examiners and their assistants are incompetent and careless to an extraordinary degree, or wilfully disregard the instructions laid down by the University for the conduct of the examination. A Board of Moderators scrutinizes the papers before they are printed. After the Examination is held the chief examiners carefully discuss with the assistants the method of marking. The assistants then read a certain number of books, which have to be forwarded at once to the chief examiners in order that they may satisfy themselves that all are marked to a uniform standard. As the reading of the books proceeds, the chiefs receive for revision those for

which the total marks lie within certain limits on each side of the pass line. This procedure ensures that no candidate who has the least claim to consideration can be rejected without a careful scrutiny of his work by two examiners. It is unfortunate that rejected candidates and their friends should have been led to bring against the examiners a serious charge which is apparently based on nothing more substantial than their own natural feelings of disappointment.

The Oxford and Cambridge Universities Bill.

Mr. Fisher proposes to introduce a Bill for appointing two Commissions for these Universities, their duties being to make statutes and regulations for the University, its halls, colleges, etc., in accordance with the recommendations of the Royal Commission.

The objects of the Bill, both commendable, appear to be to save time and reduce formality. The proposed Commissioners are named in the Bill and will inspire confidence, Lord Chelmsford being Chairman of Oxford Commissioners, and Lord Crewe of the Cambridge Commissioners. The Report of the Royal Commission which was signed in March has been singularly free from public criticism. As the result of earlier reports of this character in the Victorian period, pamphlets, flysheets, and articles fell as thick as leaves of Vallambrosa. The only inference to be drawn from the peaceful reception of the recent Report is that its recommendations meet the financial needs of the Universities without unduly disturbing their domestic arrangements. This is satisfactory so far as it goes; but from the public point of view it is unfortunate that the Report did not investigate more fully the relation of the ancient Universities to our national system of public education in various aspects.

The Delhi University.

The Delhi University which came into being on the 1st of May 1922 with its Provisional Executive Council, its Academic Council, and its Admission Committee. We have in the July number of

The Mysore Economic Journal an account by the Principal of the Hindu College, Delhi, of the working of the University.

The University has but started on its career and within less than 14 days has accomplished what has taken as many months elsewhere. But a great deal yet remains to be done. It has no house of its own; it has no library; it has yet to develop its teaching in science and arts; and the constitution of the Faculties of Commerce, Technology and the Fine Arts is still an event of the future. An attempt has been made to approach the Government of India and the Imperial Library, Calcutta, with a view to form a nucleus of University Library, but a Library worthy of a University will, at this rate, take years to grow.

LACK OF FUNDS.

The University is suffering lamentably from lack of funds; and it may without exaggeration be regarded as the poorest University in India. It started life with a grant of Rs. 75,000 but it is not certain whether the axe will not be applied to it too. It has the cheapest full-time Registrar of all Universities on a salary of Rs. 500 a month. Its office establishment costs little more than the office establishment of a well-managed college; it is unable to pay any subsidy to its part-time Readers appointed from the staff of its colleges; and the appointment of its full time Professor and Reader depends on the full grant of Rs. 75,000 being available for the current year. Considering the expenditure of other Universities, affiliating or unitary, and taking into account the number of students for whom provision is made—for the Intermediate classes form part of the University for at least five years more—it may be regarded as the cheapest University in the country. But it cannot be run on its present lines for long, and more money must be forthcoming if it is to succeed.

ENDOWMENTS.

While there is urgent need for more munificent endowments, the people of Delhi have not forgotten the University. Mr. Paran Chand, Assistant Traffic Superintendent, B. B. and C. I. Railway, made an endowment of Rs. 5,000 for two Khatri scholarships, and Mr. Bisheshar Nath Goela offered to found three gold medals, promising to make an endowment yielding an annual income of Rs. 300.

A Child's Views on Education

The following is the view of a precocious 13-year-old child on the problems of child development,

reproduced by *The Indian Social Reformer* from a New York Journal. Every part of the child's statement is so interesting and important that we quote it in full:—

Much has been written, much has been read, on so-called child development. These books have been written by parents for parents, and I believe that it is advisable to get another's point of view, but what I think is more expedient is to make a careful study of the child's personality. A child is an individual, so much so that what others say of their children is not so important for a parent as a careful study of the child's individual character. I proffer a paper written by the child himself, the really important object of all this ado. He should be the guide, and his opinions are of more value than strange pamphlets. As Agassiz says, "Study nature, not books."

A great deal has been said about stimulating environments. I think that a stimulating environment is a necessity in the correct bringing-up of the older child, but not only a stimulating environment is needed; a little sauce, a little pepper, should be added. It seems to me that a right stimulant is responsibility. Put the child on his own responsibility and he will work wonders. Make him responsible for something and he will hold to it to the last gasp. One of the most forcible threats to an older child is to tell him that he is an example to other children. This is one of the few arguments that can never be overworked. If he fails in his responsibility his grief is terrible. Many poets have written of the joys of children, but few have sung of their grief. This is probably because their joy bubbles over, but their grief they always hide. I have known of one instance when the parent painted in most vivid tones the effect of a neglect, and then she sent the child to bed. In time for the evening chorus she woke him and when he looked down-hearted she accused him of sulkiness. The problem before most parents is that of conduct. This use of responsibility will help to remedy that. Responsibility is most properly made the watchword of one of the most progressive schools in the United States—the Francis Parker School in Chicago.

Another problem is that of obedience. I say here that no parent should ever let his child argue with him. That, if anything, will spoil a child's obedience. This, however, should not be overdone. A child's side should always be heard to the end, and then a quick obviously impartial verdict should be spoken. Forcing a child to the wall in an argument and holding so that if he answers in one way or the

other he should be convicted, is what we schoolboys call a "dirty trick" and should never be resorted to. If a child disobeys, the order should be repeated until he goes and does it. This may not sound possible, but it is so. But there is nothing a child resents so much as being ordered around like a little child, so beware of overdoing.

Confidence and trust placed in your child will do more to make him love and respect you than any terrorisms, scoldings or punishments. Treat him like your fellow-man and he will treat you the way a parent ought to be treated. A young child will bring a toy or work in his hands and show it to his parent, who is writing or engrossed in some other occupation. The mother will say "Oh? how splendid!" without taking either her eyes or her mind off her work, and the child will depart contented and pleased. The older child works hard on a piece of real work and then brings it to his mother for her to inspect and she also says, "Mother thinks it's just fine," without paying any real attention. The child goes away feeling terribly hurt. He notices every mood or temper and he can see by your face what you think. He would a lot rather that you say to him, if you are very busy, "I shall

look at it later if I have time," and that you treat him like a man.

Conduct is the greatest, and most serious problem of child life. Unselfishness is at the base of all good conduct, selfishness is at the base of all bad. And since these qualities come from the heart nothing but the heart can change them. And you parents know, almost better than anyone, how hard a child's heart is for a grown person to get at. Punishment will change the outward aspect for a time but it only embitters. An appeal to the higher emotions, such as responsibility and joy, will usually improve the conduct by opening the heart to unselfish motives. But far be it from me to pretend any knowledge where so many great scholars have failed.

As I said before, give him a share in your occupations, consult him in important things and he will be radiant, and no end of a comfort.

My object in writing this is not to tell how to raise a child, not to be presuming or impudent or fault finding, not even to tell how I would like to be raised. But just to set down my opinions on the great business of supplying the world with its next generation.

DEDUCTIVE LOGIC

For Intermediate Students of the Indian Universities

BY

G. SATYANARAYANA MURTI, M.A.,

now Professor of History and Economics,

Noble College, Masulipatam.

Price Two Rupees. Packing and Postage extra.

Copies can be had of

Prof. G. SATYANARAYANA MURTI, M.A.,

Noble College, Masulipatam

or

Messrs. SRINIVASA VARADACHARI & CO.,

Mount Road, Madras.

Reviews and Notices.

CHAUCER: THE PRIORESS'S TALE AND THE TALE OF SIR TOPAS, BY LILIAN WINSTANLEY. (CAMBRIDGE UNIVERSITY PRESS).

Lilian Winstanley has already laid all students of English Literature under a deep debt of obligation to her by her scholarly editions of Spenser's *Faerie Queene*, Books I & II and of his *Four Hymns*. She has recently published an equally scholarly edition of two Tales of Chaucer:—"The Prioress's Tale and the Tale of Sir Topas." 'Thorough' seems to be her motto and the recently published volume keeps up her reputation. The book opens with a very learned essay upon Chaucer and his Age wherein the author points out how Chaucer lived a 'full' life and was in touch with all the healthy activities of his age. The poet's chief characteristics, his knowledge of the classics and his acquaintance with the French and Italian literatures of his day, the Renaissance spirit in him which led him to take interest in science as well as his aristocratic inclinations so far as the social and political problems nearer home were concerned in which respect he differed from 'Langland,' the poet of the common people, and his predilections towards Wycliffian reform in religion are all fully described. A brief biographical account of the poet accompanied by a time chart and notes on his chief works brings the first part of the Introduction to a close.

This is followed by two separate introductions one for each of the tales edited and it is in the introduction to the second story, i.e., 'Sir Topas' that she is formulating a new theory regarding its topical significance. All Chaucerian scholars agree in thinking that the Tale is a burlesque upon the rhymed romances which were then very popular; but the author goes a step further and holds that the story is intended to be a satire against Philip Van Artevelde, the Flemish leader of burghers, whose success against the Count of Flanders was hailed by the citizens of London though the King and the nobility (chiefly John of Gaunt) sympathised with the Count of Flanders and along with the King of France and the Duke of Burgundy tried to help him against the burghers. The learned author arrays so many facts in support of her view that her conclusion seems to be almost irresistible. There is the usual section upon the grammar and metre of Chaucer and the notes at the end of the volume are brief and illuminating.

Altogether this is a masterly production and we would commend it to all students of English literature, especially to lovers of Chaucer, the first great English poet.

EUROPE, A REGIONAL GEOGRAPHY, BY N.E. MACMUNN AND GERALDINE COSTER. (OXFORD, CLARENDON PRESS). Pp. viii & 343.

The late Prof. Herbertson intended to write a sufficiently advanced course of a regional geography of Europe and left a general outline of the book, an introductory chapter and full notes on the Russian section. He also discussed the scheme of the book thoroughly with Miss N. E. MacMunn who has since worked on the basis of a letter of his, explaining his ideas for the working out of the scheme. Both the authors have closely attempted to follow out the scheme of Prof. Herbertson using his introduction, his main sectional headings and his own order of treatment. The divisions taken are regional like the Eastern Lowlands, Scandinavia, the Mediterranean lands, the Western Mediterranean lands, the Alpine and Carpathian lands and Central Europe north of the mountain belt and Western Lowlands. The treatment of these regions is said to be based on a study of the interaction between man and his physical environment; it is also exhaustive and thus supplies real material for essays and exercises, avoiding at the same time compressed and tabulated matter which is so difficult to learn out of and which can only be learnt by a process of memorization. Among the East Mediterranean lands, Asia-Minor, Syria, Egypt and Palestine have also been treated, specially Palestine on account of its religious and present-day importance. The political boundaries of the units of these regions are carefully explained at the end of each section. Monthly climatic figures are given for each sub-region with details of the elevation of selected places, their seasonal temperatures and rainfall; thus material is supplied for climatic graphs, the making of which is one of the safest and surest methods of gaining a clear conception of climatic conditions. Towns and town-sites have been treated logically and the geographical reasons for their importance are clearly brought out. In places where an ordinary atlas is generally lacking in information special diagrams are provided. At the end there are useful lists of questions on the subject. The railway-routes and the natural communications are clearly explained especially in the section dealing with the Eastern Lowlands.

THE SCOPE OF SCHOOL GEOGRAPHY, BY R. N. B. BROWN, O. J. R. HOWARTH AND J. McFARLANE. (OXFORD, CLARENDON PRESS, 1922.) Pp. 158. Price 5s. 6d.

This book collaborated by three writers gives some clear indication of the scope of a geography course required for the School Certificate examina-

tion and at the same time tries to inform the teachers of those directions and that value of geographical study which he may indicate, however briefly, to his pupils. They impress upon us the fact that Geography as a secondary school subject is in process of development capable of great modifications and developments; and they finally warn us that if good results are to be looked for from Geography teaching, the teacher must be a specialist in his subject who must be able to impart a true geographical outlook of man and the world. The teacher is first taught to minimise as far as possible the generalisations regarding physical processes, especially as regards those processes involved in mountain formation. The processes by which plains are formed, the distribution of lakes, the distinction between continental and oceanic islands, the distribution of minerals and water-supplies, are all matters of importance that ought to be touched. "The many geological facts to which the teacher of geography has constantly to refer, are not matters for systematic and to a certain extent separate treatment, but are to be regarded as subsidiary to the description of existing land-forms and to the influence which they exercise upon human activities." (p. 37). Thus the physical history of a place or region must not be pursued for its own sake, but must be dropped when it ceases to be of geographical importance—"when it ceases to throw light upon the relation between man and his environment, which is the true function of the geographer."

Again good geography requires a knowledge of climatic conditions, viewing those of particular parts of the world before the whole; but an elaboration of details should be made only at a later stage. Again the geographer ought to remember that vegetation and not the entire flora is his province; since the latter has in most of its aspects no geographical bearing. A proportion should be maintained in the treatment of the animal life of a region; and geography should be purged of a tendency to regard it as a depository for odds and ends of entertaining information.

It is the work of the geographer to provide much of the material with which the well-equipped economist has to deal; and the regional survey is the one most usually adopted in the treatment of economic geography; though it may fail to take account of variations in the economic output of different parts of the same region, due to differences in the political and social organisation of the inhabitants. Above all "the teacher ought to beware lest in his enthusiasm for the application of geographical principles, he leads his pupils into the belief that man is a creature of his environment and that his actions are determined

by it" (p. 96). In the treatment of communications regard must frequently be had to the historical development and economic importance of the more important routes.

The author's conclusions with reference to historical geography are that (1) there is a much more intimate relation between geography and history in school education than we are prepared to admit, (2) the geographical teaching of any area should be always a sufficient step ahead of the historical. The teacher should not overstress the function of race in geography; because overstress of that phase coincides with the popular fallacy which attributes most, if not all, characteristics of a people to their ethnical descent, ignoring altogether the physical and economic factors. With the question of race-characteristics the teacher of geography is not directly concerned. The art of map-reading should be carefully cultivated; and map-reading should not be confined to the explanation of symbols. Map-projection should not be insisted on in the case of small children. Above all geography should be treated as a synthetic subject—synthesising all the various factors which constitute together the environment of man, and showing the mutual interaction between man and his environment.

THE WORLD ABOUT US—A STUDY IN GEOGRAPHICAL ENVIRONMENT, BY O. J. R. HOWARTH. (OXFORD UNIVERSITY PRESS, 1922.) Pp. 94.

The study of geographical environment is in its infancy. The study of it in its ideal perfection connotes "the collection of every fact in geography and allied subjects which bears in any way upon human activity." This must naturally represent the efforts of generations of workers each in his particular special field and topic. Geographical environment affects to a greater or less extent man's movement and settlement, his social, political and economic status, his mind and his body. We have to consider the influence of communication and natural barriers, the influence of factors upon economic development, upon the psychology of the nation, upon its religion, literature and social structure. A complete survey of all the influences of environment should borrow the requisite data from the kindred departments of science concerned. This book deals with the outlines of the subject of geographic environment, the factors which operate, the connection between environment and distribution of population, migration, transport, political growth and changes, as well as with the more complex problems con-

nected with environmental influence affecting smaller areas. As illustrations of the last-mentioned topic, the author takes the S. W. part of the Isle of Wight and a part of Kent and makes fairly elaborate studies of these. Lastly he tries to explain the value of a right understanding of geographical environment in historical study; it is very valuable especially as retrospectively applied to history. This book is bound to suggest interesting lines of thought and study to eager schoolmasters.

A NEW HISTORY OF GREAT BRITAIN, by R. B. MOWAT—FROM THE ROMAN CONQUEST TO THE OUTBREAK OF THE GREAT WAR. (OXFORD UNIVERSITY PRESS, MILFORD, 1922). Pp xxxii, 1028, AND NUMEROUS ILLUSTRATIONS. Price 10s. 6d.

This new text-book of British History attempts to give a continuous account of the life of the English nation, dealing fully with all those aspects of it that are essentially to be understood by a student of the present day—for illustration, a great deal of space has been devoted to economic and social history, the development of colonies and of the Imperial idea and a more detailed acquaintance with recent foreign policy. It is the duty of teachers to keep in view these aspects of historical growth which are of so great a current interest and to teach accordingly; while the text-books, like the one under review, must be correspondingly up-to-date. The book is also full of quotations from contemporary writers and sources of information and attempts "to let the past speak for itself, through the written words of those, who were themselves spectators and actors." Again the author tells us that his language is the ordinary literary English, which every careful teacher uses, and which boys and educated men do generally understand; and it has not been purposely simplified to suit the fad of "writing down to the minds of the young people." The book is in three parts, the first section going down to 1603; the second down to the Battle of Waterloo; and the third down to the crisis of July, 1914.

The very commendable feature in the book is that we are given, along with the course of treatment, pearls of extracts from original and contemporary sources which are strung on to the thread of narrative; and as a result we get a beautiful garland. The nearest approach to this kind of garland of pearls of original extracts in the field of Indian History text-book writing is Miss Ethel Sykes' *Readings from Indian History*, Parts I & II, which were reviewed in our columns some years back. Mr. Mowat gives us in the

course of his treatment extracts from Bede, Beowulf, William of Malmesbury, the *Annals* of Burton Abbey, Jean Froissart, Chaucer, the Burgundian Chronicler Philip de Comines, More's *Utopia*, Hakluyt, Harrison's *Description of England*; Clarendon's *History of the Great Rebellion*; Cromwell's *Letters and Speeches*, Burnet's *History of His own Time*, Pepy's *Diary*, Swift's *The Drapier's Letters*, Burke's *Speeches* and for the last century sources too numerous to mention. We have got here extracts and passages from the important laws and statutes passed and quotations from standard works like Bacon's *Life of Henry VII*, Southey's *Life of Nelson*, the histories of Macaulay, Mahon, etc. The most striking accomplishment of the book is its wealth of illustrations which abound in specimens of church and military architecture, etc., in the Middle Ages, and which portray largely features of recent social and industrial development. Explanatory notes are given wherever the interpretation of the illustrations requires it—as in the case of pictures on pp. 380, 381, 392, etc. We have got pictures of a few postage stamps which illustrate the growth of colonial expansion, and others curiously illustrating the development of advertising, etc. The book follows the plan of treatment which grows more and more elaborate as the ages proceed. It has imbibed fully the spirit of J. R. Green, who by his genius brought out forcibly the striking characteristics of each epoch and whose presentation is so unrivalled for its literary beauty and imaginativeness. It can be used safely and profitably as a text for our S.S.L.C. and Intermediate students; and it is bound to give them, especially as regards the modern period all that they need to learn—constitutional and military affairs, a knowledge of economic and social history, and a detailed outline of Imperial expansion and recent foreign policy together with their significant features. The book has got its usual dates-tables, and genealogical trees. It is also available in its three separate parts.

HISTORY OF THE INDIAN PEOPLE.

LIFE IN ANCIENT INDIA

In the Age of the Mantras

By P. T. SRINIVAS IYENGAR, M.A., L.T.

D. Cr. 16mo. 140 pp. Price Rs. 1. Charges extra.

By the same Author.

THE GAYATRI

D. Cr. 16mo. 48 pages.

Price 6 as. Charges extra.

SRINIVASA VARADACHARI & Co., MADRAS.

Indian Educational Notes.

A Report of the Caldwell High School Old Boys' Association, Tuticorin.

The Association was organised in the year 1919; and we are proud to show a record of steady growth and useful work done.

We have this day 400 members, on the Roll, increasing our Foundation Fund to Rs. 400. This is the financial nucleus of the Association, held as Fixed Deposit in the Imperial Bank.

The Sporting section of the Association has been very active this year. From the year 1913, the local old boys have been annually playing a Foot-Ball match with the High School Team, every Deepavali Day. This year we have instituted a Challenge Shield in Foot-Ball; and it is proposed to institute in coming years similar Shields in Badminton and Hockey. The central idea of these Deepavali matches, is not so much a final trial of strength, as giving an opportunity for the old boys to meet the new, at least once a year, in a friendly brotherly spirit.

Ours is a young organisation, and young members are naturally impatient. In the words of a great man, it is Young India "drunk with a sense of its rights but not sober with a sense of its responsibilities." But I believe, it is but a passing phase of evolution, and does not require more than a passing remark.

Our attempt to organise local branches in certain centres abroad has not so far met with any appreciable amount of success. We tried to start a Labour Bureau for Old Boys; but we found the world outside too big for us and the struggle for existence too keen.

It may be observed that in the political as well as religious life of India, we are to-day engaged in a grand process of 'Reversion of the current'—changing 'getting' into 'giving'—a rather difficult process indeed. I am proud to add that our little organisation has its own humble part in this noble task.

But there is a misconception in certain quarters as regards the purpose of the Association, that it is an organisation started by the school, for the school. It is an idea that must go. Money is not our aim. We are here to 'link up the past with the present,' to get the old generation interested in the new and to serve as a healthy bed for a happy current to flow.

We sincerely thank all the members who have helped financially to make the Association useful. We are especially thankful to Messrs. M. V. E. Kasimay and Rathnasamy Nadars, for their annual donation of Rs. 50, and Messrs. M.S. Yosodian and J. Devasagayam for their liberal contribution towards the School Prizes.

Being the end of the year, we close with the best of Christmas and New Year wishes—'Peace and good will', to members and all.

7th Nov, 1922.

S. G. TANGASWAMY,
Secretary, C.O.B.A.

TANJORE DISTRICT TEACHERS' GUILD.

Resolutions Passed.

I. That the Guild, while deeply sympathising with the objects of the University Bill is of opinion that, considering the present financial stringency, University Reform may be deferred till the necessary reforms in the field of Elementary and Secondary Education are effected.

II. That the Guild expresses its keen disappointment and regret at the continued apathy and callousness of the Government to the repeated prayers of the teachers for better pay and prospects, while the demands of other Departments, for example, the P. W. D., have been generously considered, and points out that the continuance of this attitude of the Government will militate against the hearty co-operation of teachers, particularly at the present time, when their co-operation is essential for the carrying out of the Educational Reforms contemplated.

III. That in the Secondary Education Board there be a preponderating element of those actually engaged in teaching work.

IV. That among the powers to be given to the Secondary Education Board the following be placed foremost:—

1. Fixing uniform grades of salaries for teachers,
2. Transferring of teachers with their consent,
3. Administering the Provident Fund,
4. Acting as an appellate authority in matters that may be referred to it.

V. That in view of the importance of Hindi as the future *lingua franca* of India, provision be made in all Schools in the District for the teaching of Hindi either as a compulsory or at least, as an optional subject and that in due time, the Educational authorities be approached to give this the same place in the curricula of studies as the vernaculars.

VI. That this meeting of the Guild lays stress on the resolution passed at the Provincial Conference recommending the formation of Teachers' Councils in every Secondary School, and requests the Managers and Headmasters of Schools to give immediate effect to the same.

The Educational Review.

The approaching departure of His Excellency Sir Harcourt Butler will deprive the United Provinces of a very great friend of education. His Excellency's period of governorship has been one of considerable activity in educational matters. The Provinces entered upon a programme of vigorous expansion in elementary education and the number of primary schools is almost being doubled in a remarkably short period. The establishment of the University of Lucknow, the reorganisation of the University of Allahabad and the starting of the High School and Intermediate Board under legislative sanction, are only some of the measures inaugurated by him during his period of office. Money has flowed for educational purposes with a facility unknown in other provinces and it needs no special gift of prophecy to say that it will be a long time before the Provinces will have a similar spell of good luck in matters of funds for education. Special interest attached to the recent Convocations of the Lucknow and Allahabad Universities, over which he presided for the last time as Chancellor. The two Universities conferred on him the Honorary degree of LL. D., a most well-deserved tribute remembering that the Lucknow University and the Allahabad University in its present form are both his creations. Sir Harcourt made touching references to his impending departure from the scene of his present activities. Whatever opinions may be passed on his general

administration, his name will be handed down in the United Provinces as that of a great friend to education.

Sir Asutosh Mukherjee continues his fight with the Government of Bengal for the preservation of the autonomy of the University of Calcutta. It looked as if some of the present financial troubles of the Calcutta University could be got over when the Bengal Legislative Council recently granted a sum of rupees two lakhs and a half to meet its large deficit, but the grant is being accompanied by conditions which the Senate is not able to accept. The Government concluded on the mere report of the Accountant-General, without giving an opportunity to the Senate to explain, that the financial administration was not satisfactory and also laid down a condition that the University should undertake no further expansion involving financial responsibility until their present financial position improved and that all arrears of salaries should be paid forthwith. The Senate's contention is that it is not for the Government to regulate its discretion in such matters, the University being an independent corporation with a knowledge of what is most beneficial to its purposes. In moving the adoption of a report which pressed this contention, Sir P.C. Roy said rightly that it would be better for them to close their door rather than accept dictation from the Government. Sir Asutosh said that they were faced with the greatest crisis that had occurred during the thirty-four years he had been

member of the Senate. He charged the Government of Bengal with passing sentence on the Senate on the strength of the Accountant-General's report, before the Senate had an opportunity of reading it. He described the conditions laid down as humiliating, derogatory and unacceptable to an autonomous and self-respecting institution. He concluded his speech with words which deserve to be enshrined on the portals of all Universities: "You give me slavery in one hand," he said "and money in the other and I will not take the money. We will retrench, we will live within our means, we will starve, we will go from door to door throughout Bengal. I will ask my post-graduate teachers to starve, but to keep their independence. Don't believe for a moment that there is no Providence. If science or philosophy has taught you that, get rid of that blunder. If it is the design of Providence that higher education should disappear from Bengal, let His will be carried out. But I have an unalterable faith in Providence. Do your duty as members of the University, and stand up for its rights." Sir Asutosh carries with him the goodwill and sympathy, we can assure him, of all true educationists in this struggle with the Government of Bengal. We commend the following remarks of the recent Royal Commission on Oxford and Cambridge Universities, to the attention of educational reformers:—

"That the attempt of the State to control opinion in the Universities and colleges broke down in 1688 and was

never revived, is a great fact that has distinguished our University system from that of France and Germany. It is a precious part of our intellectual and moral heritage as a nation. If there were any danger that grants of public money would lead to State interference with opinion in the Universities, it might be the less of two evils that they should decline in efficiency rather than lose their independence in order to obtain adequate means. But the ways of thought and feeling of the modern British community are hostile to any development in the direction of State control of the academic spirit and the public grants already enjoyed by the old Scottish and new English Universities have not led to State interference with opinion and tendency in those institutions."

We have pleasure in giving publicity to the following suggestion for the calling of an Indian Universities' Conference, made by several Professors in Northern India:—

SIR:—

'Expansion of educational activities is now a watchword in India, and in the sphere of higher education new Universities are springing up everywhere while the old ones are making strenuous efforts at reorganisation. Ideas and ideals are in a state of flux to a considerable degree, and clarification can take place only after deliberation and experiment. Educationists in India are drawing from different sources for their ideals of University organisation—from the ancient *Ashram* system of India to the newest models of American Universities conducted on business lines. Standardisation was difficult enough when there were only five

Universities, but that difficulty has increased ten-fold with the advent of the newer ones. The only means by which standardisation was kept up automatically to a certain extent, namely, by the exchange of examiners, can no longer be sufficient in future.

There are yet other considerations. The financial situation has forced our attention as a nation on retrenchment, and the Universities are getting their due share of it. No one University is in a position to say that it can provide the best means in every branch either in point of equipment or personnel; yet every one is eager to open courses of instruction on an extensive scale very often to the detriment of not only intensive study but also the general educational level in the University. Too shallow or too specialised an education can do no good either to the individual or to the nation, and the problem requires careful handling. Men, money and material are scattered here and there, and the country is beginning to doubt whether the educational benefits obtained are commensurate with the expenditure involved. Instead of each University pursuing a policy of rivalry in every branch of knowledge, there should be co-ordinated specialisation so that energy may be concentrated instead of being dissipated. Few people will dispute the fact that there are special facilities existing in particular Universities for the development of particular subjects by virtue of their situation, tradition and attitude. The purpose of economy, both material and mental, will best be served if these limits are intelligently recognised and if educational policy be shaped in accordance.

Poverty is our greatest misfortune as a nation, and it is no wonder that prominent educationists in India are pressing the claims of technical education as a fundamental part of the University curriculum. But this laudable enthusiasm is often likely to lead to over concentration of efforts which tends to mere copying of methods evolved elsewhere. The country is tired of leading a parasitic

life for the ideas of industrial development, and no appreciable economic progress is possible unless we evolve new lines of thought even within the limits of applied knowledge. We have yet to realise the paramount necessity of developing knowledge for its own sake, of which industrial development is a by-product. Public support will assume greater importance with the multiplication of Universities, and so long as the public demand an immediate return in the form of highly specialised technical workers, there will not be much free development of technical education itself. The ideals of education, however, are higher still, the Universities having for their object not merely the application of knowledge but its conservation, discovery and distribution, and, above all, the creation of knowledge-makers. Organised efforts are required to educate the public to these ideals, and general concerted action will have to be taken all over India, and not in isolated places.

Further top heaviness in the matter of education is bound to widen the gulf between the intelligentsia and the masses. Ideas are slow to diffuse, and the difficulty is intensified in India by many avoidable and unavoidable causes. The Universities ought to make organised efforts in quickening the percolation of ideas to the masses. The masses are hardly in a position to assimilate and appreciate any new ideas evolved by the intelligentsia, and consequently any good that might flow from such advancement of knowledge is withheld from the public. Encouragement for original thought is needed not merely within the limits of the University area but must also flow from outside, and that can come only when the outside public is in a position to reach, understand and appreciate a new line of thought. These and many other considerations deserve the close attention of the various Universities, and other intellectual bodies in the country, and we venture to appeal to educationists in various institutions to organise a representative Conference, to meet from time to time for deliberating over these matters.

In a communication like this, it is hardly possible to lay down the details of such an organisation or to suggest steps to be taken in order to remedy the evils referred to. It is obvious that for the success of the scheme, the men chosen must not only be capable of handling intricate problems confronting us in different branches of knowledge, but must also command the confidence of the executive authorities in various Universities. Deliberation is necessary before we can arrive at a satisfactory decision as to the best means of securing men who will chalk out the proper lines of action. Our present aim is merely to draw the attention of all concerned to this problem, and we hope that its importance will elicit suggestions and hopeful criticism.

Yours, etc.,

P. PARIJA, M.A. (Cantab.), I.E.S.,
Professor of Botany, Ravenshaw
College, Cuttack.

K. R. GUNJIKAR, B.A. (Cantab.),
University Professor of Physics,
Benares Hindu University

M. B. RANE, M.A., Professor of
Chemistry, Benares Hindu Uni-
versity.

R. S. INAMDAR, B.A. (Cantab.),
University Professor of Botany,
Benares Hindu University.

It may be remembered that the Indian delegates at the Universities' Congress held last year at Oxford made a similar suggestion.

The following impressions of German Universities on Dr. Wali Mohamed, Ph. D., as reported in the press, will be read with interest by numerous young men all over the country who sometimes think of going to German

Universities in preference to Universities in Great Britain and Ireland:—

He said the attitude of the German Universities towards Indians was quite friendly and the students were well-received almost everywhere. He spoke of the financial strain which had affected the German Universities and said the abnormal rise in prices had hit them hard. After stating that professors and teachers were almost starving and the students could not afford to buy books or pay the University fees in Germany, Dr. Wali Mohamed said:—"There seems to be a widespread idea in this country that living is exceptionally cheap in Germany and that with a low rate of exchange one can live there for practically nothing. This is by no means the case. As prices keep pace with the exchange value of money it is not uncommon to find the same article quoted at different prices at different times of the day. Moreover a foreigner has to pay higher fees in the University and is subject to a foreigner's tax. As time passes persons with foreign money are looked upon with more and more disfavour and the Germans resent the advantage the foreigners derive from the lowness of the exchange value of work. It is, however true, that for those who change foreign money when it is required and not beforehand, living in Germany is decidedly cheaper than living in any other country. The monthly cost for a student would not be less than six or seven pounds. It should be borne in mind that the student class in Germany is accustomed to a remarkably simple and frugal life and there is nothing of expensive and extravagant habits characteristic of Oxford and Cambridge."

In view of some statements which have recently appeared elsewhere in India on the cheapness of education in Germany, the warning contained in Dr. Wali Mohamed's statement may not be without use.

We have never made a secret of our opinions with regard to the Non-Co-operation movement in relation to educational institutions, but we are prepared at the same time to view with sympathy any attempts at forming new educational institutions in the country independently of Government control and even of association. India is such a vast country that there is considerable scope for educational experiment and after all it may not be a disadvantage to explore new approaches to the goal which all of us have in mind. It is with this conviction that we welcome the proposed Tamil Gurukula Vidyalaya at Kulladakurichi in the Tinnevely District. An extremely interesting prospectus has been issued and we notice that while attempts are being made to make the programme quite national, the intellectual basis is not to be neglected. The organisers have been able to secure the services of Mr. V. V. S. Aiyar, B. A., the distinguished Tamil patriot and scholar whose admirable translation of the *Kural* is a noble monument of literary ability. We wish the institution all success and we hope that the authorities will receive the necessary amount of public sympathy to start the institution.

The Hon. Bertrand Russell's recent Conway Memorial Lecture, reprinted in book-form by George Allen and Unwin, is a publication which must be eagerly studied by

members of the teaching profession in India. It is on the subject of *Free Thought and Official Propaganda* and draws attention to the injurious effects of official restrictions on the development of thought, a subject having a bearing on the teacher's work in the class-room. It is not denied that in the earlier stages of education, there is not much scope for the play of individual opinion on the part of the young pupil, but it is impossible to realise the injury a thoughtless teacher might do to the blossoming intellect of a child, by the stern imposition of his own opinions on the child's intellect in season and out of season. There are some special remarks on the teaching of history in schools:

"Elementary education in all advanced countries," he writes, "is in the hands of the State. Some of the things taught are known to be false, by the officials who prescribe them, and many others are known to be false, or at any rate very doubtful, by every unprejudiced person. Take, for example, the teaching of History. Each nation aims only at self-glorification in the school text-books of History. When a man writes his autobiography he is expected to show a certain modesty; but when a nation writes its autobiography, there is no limit to its boasting and vain glory. When I was young, school-books taught that the French were wicked and the Germans virtuous; now they teach the opposite. In neither case is there the slightest regard for truth. German school-books, dealing with the battle of Waterloo, represent Wellington as all

but defeated when Blücher saved the situation; English books represent Blücher as having made very little difference. The writers of both the German and the English books know that they are not telling the truth. American school-books used to be violently anti-British; since the war they have become equally pro-British, without aiming at truth in either case. Both before and since, one of the chief purposes of education in the United States has been to turn the motley collection of immigrant children into good Americans. Apparently, it has not occurred to any one that a 'good American,' like a 'good German' or a 'good Japanese' must be *pro tanto* a bad human being. "A good American" is a man or woman imbued with the belief that America is the finest country on earth, and ought always to be enthusiastically supported in any quarrel * * * Meanwhile the whole machinery of the State,

in all the different countries, is turned on to making defenceless children believe absurd propositions the effect of which is to make them willing to die in defence of sinister interests under the impression that they are fighting for truth and right. This is only one of countless ways in which education is designed, not to give true knowledge, but to make the people pliable to the will of their masters. Without an elaborate system of deceit in the elementary schools, it would be impossible to preserve the camouflage of democracy." There is probably a certain amount of exaggeration in this condemnation of the spirit of elementary education, but Mr. Bertrand Russell's observations must set people thinking about the extent to which the spontaneous development of reason is sought to be hindered at every turn by restrictions of various kinds.

Just Ready!

Just Ready!!

"AS YE SOW SO YE REAP"

“இட்டாரீக்கு இட்டபலன்”

(IN TAMIL)

By

Miss J. PONNUSWAMI RAO,

Asst. Mistress, Govt. Training School for Mistresses, Conjeevaram.

DEDICATED TO

Mrs. C. M. DRYSDALE,

First Deputy Directress of Public Instruction, Madras.

Price As. 10. Charges extra.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

BOMBAY UNIVERSITY EXAMINATIONS.
School Final 1923.

MATTHEW ARNOLD: SOHRAB AND RUSTUM, with Introduction and Notes, by RS. A.
Mr. T. O. Hodges, B.A., Professor of English, Presidency College, Madras ... 1 0

B. A. 1923 and 1924.

SHAKESPEARE: MACBETH, with introduction and Notes, by the Rev. J. Morrison, M.A.,
D.D., formerly Principal and Professor of English, General Assembly's Institution,
Calcutta (College Classics) ... 1 6
—: MIDSUMMER NIGHT'S DREAM, with Introduction and Notes, by the Rev. R.
Scott, M.A., Professor of English, Wilson College, Bombay (College Classics) ... 1 6
—: JULIUS CÆSAR, with Introduction and Notes, by Mr. Mark Hunter, M.A.,
Prof. of English, Presidency College, Madras (College Classics) ... 1 12
—: TWELFTH NIGHT, by Mr. Michael Macmillan, M.A., D.Litt., I.E.S. (Retired) Eng-
lish Lecturer in the University of Birmingham (Formerly Principal and Professor of
English, Elphinstone College, Bombay) ... 1 12
SHELLEY: ADONAI, with Introduction and Notes, by Mr. W. E. Hoare, M.A., formerly
Principal, Doveton College, Madras ... 0 10
MILTON: LYCIDAS, with Introduction and Notes, by Mr. N. Vaidyanatha Iyer, M.A.,
formerly of the Teachers' College, Saidapet ... 0 6
TENNYSON—GUINEVERE, with Introduction and Notes, by Mr. E. H. Elliot, B.A.,
formerly of the Presidency College, Madras ... 1 4
—: THE TWO VOICES, with Introduction and Notes, by the same Author ... 1 4

M.A. 1923 and 1924.

SHAKESPEARE: OTHELLO, with Introduction and Notes, by Mr. Michael Macmillan,
M.A., D. Litt., formerly Principal, Elphinstone College, Bombay (College Classics) ... 1 6
CHAUCER: PROLOGUE, with Introduction and Notes, by Mr. W. J. Goodrich, M.A.,
formerly Principal, Pachaiyappa's College, Madras ... 1 2
—: THE KNIGHT'S TALE, with Introduction and Notes, by the same Editor ... 1 2

Forthcoming Publications:

In the Press

PRACTICAL MANUAL OF ENGLISH

BY
Mr. N. G. WELINKAR, M.A.

New Edition—Entirely Revised—in 2 Parts.

A PREPARATORY ALGEBRA

BY
Mr. V. RAGHUNATHA AIYAR, B.A., L.T.,
Assistant, Teachers' College, Saidapet.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

A BOOK OF VERSE

Compiled primarily for Indian Boys and Girls

BY

SIR HENRY NEWBOLT, LL.D., D.LITT.,

Chairman of the Committee on the Teaching of English in England.

Price, Re. 1.

"This is an anthology of exceptional merit, one that could be made only by a good poet and a poet of faultless discrimination.....Many well-worn poems are found in the anthology, but what is more distinctive, numerous living poets have been drawn upon and quite the most interesting section is perhaps the work of Sir Henry Newbolt himself.....Of living poets ten little pieces from Walter de la Mare are quite perfect gems..... Altogether we have here an excellent up-to-date anthology of poetry worthy of universal use and appreciation"—*The Educational Review, Madras.*

THE LOTUS-BOOK OF ENGLISH VERSE

BY

P. C. WREN, M.A., I.E.S.

Seventh Edition.

Price, Re. 1-2.

A book of poetical selections unique in several respects, and better adapted for Indian school boys than any other school-anthology

K. & J. COOPER, Publishers, BOMBAY.

UNIVERSITY OF MADRAS.

Intermediate Examination, 1923. B.A. & P.
GRAY—ELEGY AND OTHER POEMS, with Introduction and Notes, by E. E. Kellett, M.A. 0 12 0
***TENNYSON—MORTE D'ARTHUR**, with Introduction and Notes, by E. H. Elliot, B.A. 0 12 0
ODE ON THE DEATH OF THE DUKE OF WELLINGTON, with Introduction and Notes, by E. H. Elliot, B.A. 0 8 0
MATTHEW ARNOLD—RUBY CHAPEL AND THE FORSAKEN MERMAN, with Introduction and Notes, by E. H. Elliot, B.A. 0 8 0
ADDISON—SELECTIONS FROM THE SPECTATOR, with Introduction and Notes, by E. H. Elliot, B.A. (Coverley Papers, &c.) 1 12 0
 * Both the books together Re. 1.

Shakespeare—Richard II. with Intr. and Notes, by Prof. J. C. Rolio, M.A. Mysore University. *- In the Press.*

Intermediate Examination, 1924.
MILTON—L'ALLEGRO AND IL PENSEROSO, with Introduction and Notes, by A. J. Grieve, B.A. 0 10 0
WORDSWORTH—SELECTIONS CONTAINING RESOLUTION AND INDEPENDENCE, AND OTHER POEMS, with Introduction and Notes, by E. H. Elliot, B.A. 0 12 0
TENNYSON—SELECTIONS CONTAINING MORTE D'ARTHUR, OENONE, ULYSSES, AND SIR GALAHAD, with Introduction and Notes, by E. H. Elliot, B.A. 0 14 0
TENNYSON—LOTOS-EATERS, with Introduction and Notes, by E. H. Elliot, B.A. 0 4 0
D'ARTHUR AND ODE ON THE DEATH OF THE DUKE OF WELLINGTON, OENONE, ULYSSES, THE LOTOS-EATERS AND SIR GALAHAD. Red Letter Library. Cloth bound 1 Re. Reduced to 0 12 0

B.A. Degree Examination, 1923
MILTON—COMUS, with Introduction and Notes, by Dr. S. Saththianadhan, M.A. 2nd edition 0 12 0
CARLYLE—HERO AS MAN OF LETTERS, with Introduction and Notes, by E. E. Kellett, M.A. 0 12 0
SPENSER—PROTHALAMION, with Introduction and Notes by E. H. Elliot, B.A. 0 10 0
LESLIE STEPHEN—JOHNSON. English Men of Letters Series. Paper cover 0 9 0 Cloth 0 13 0
CARLYLE—HERO AS POET, with Introduction and Notes, by the Rev. S. Gnana-muthu, M.A. 0 8 0

B.A. Degree Examination, 1924.
SPENSER—PROTHALAMION, with Introduction and Notes, by E. H. Elliot, B.A. 0 10 0
MILTON—COMUS, with Introduction and Notes, by Dr. S. Saththianadhan, M.A. 2nd edition 0 12 0
POPE—BARK OF THE LOCK, with Introduction and Notes, by E. E. Kellett, M.A. 1 0 0

BROWNING—SAUL, with Introduction and Notes, by C. H. Payne, B.A. 0 12 0
***WORDSWORTH—SELECTIONS**, containing On Revisiting the Wye above Tintern Abbey, Ode to Duty and other poems, with Introduction and Notes, by E. H. Elliot, B.A. 0 14 0
***WORDSWORTH—SELECTIONS**, containing Ode on Intimations of Immortality, and another poem, with Introduction and Notes, by E. H. Elliot, B.A. 0 12 0
CARLYLE—HERO AS MAN OF LETTERS, with Introduction and Notes, by E. E. Kellett, M.A. 0 12 0
 * Both together Re. 1-4-0.

Other Intermediate and B.A. Books.
INTERMEDIATE GEOMETRY (Theory and Practice) by M. Sathyanarayana, M.A., L.T., and K. S. Patrachariar, M.A., L.T. 2nd and Revised Edition 2 8 0
THE STUDENT'S COMPANION TO GEOMETRY, for the Intermediate Examination of the University of Madras, under the New Regulations, by K. Deva Rao, B.A., L.T. 0 8 0
EXAMPLES ON TRIGONOMETRY, containing the F.A. Trigonometry Papers for 15 years, 1888 to 1902, with Solutions of all the Problems, by P. A. Subramania Aiyar, B.A., L.T. 0 8 0
EXAMPLES ON ALGEBRA, containing F.A. Algebra Papers for 17 years, 1889 to 1905, by the same author 0 8 0
INTERMEDIATE CHEMISTRY, by P. Lakshmi Narasu, B.A., Professor of Physical Science, Pachaiyappa's College, Madras. 3 8 0
INTERMEDIATE PHYSICS, by the same author. 4 0 0
LECTURES IN LOGIC, by Rao Bahadur S. Mangesh Rao, B.A. 2 8 0
STUDENT'S HAND-BOOK OF PSYCHOLOGY, by the late Dr. S. Saththianadhan, M.A., LL.D. (2nd Edition) 1 6 0
QUESTIONS AND ANSWERS ON ELEMENTARY LOGIC, by M. Macmillan, M.A. 1 0 0
THE ELEMENTS OF HUMAN PHYSIOLOGY, by G. S. Ramasami Aiyar, B.A. 1 0 0
B.A. EXAMINATION ENGLISH LANGUAGE, LITERATURE AND COMPOSITION PAPERS of 1881 to 1906 (both inclusive) 0 5 0
F.A. MATHEMATICS—ALGEBRA AND TRIGONOMETRY PAPERS, with Solutions and Notes from 1901-1903, by B. Hanumantha Rao, B.A. 0 4 0
MINTO'S LOGIC—INDUCTIVE AND DEDUCTIVE, 5th Impression, Rs. 3-6-0. Reduced to 2 4 0
ROBINSON—SHORT HISTORY OF ROME—Rs. 2-10-0. Shop soiled, reduced to 1 0 0
FAWCETT—MANUAL OF POLITICAL ECONOMY. Rs. 9 0-0. Reduced to 4 0

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

The Educational Review

A Monthly Record for India.

VOL. XXVIII.]

DECEMBER 1922.

[No. 12.]

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

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

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

ALLAHABAD UNIVERSITY CONVOCATION ADDRESS.*

THIRTY-FIVE years ago, my illustrious predecessor, Sir Alfred Lyall, delivered his inaugural address on the opening of this University. He regarded its foundation as an important step towards the gradual evolution of self-government. Provincial autonomy in education was, in his judgment, a preliminary to any other steps to be taken on the same road. It would also lead, he anticipated, to the diffusion of learning and the growth of sound opinions in political matters. Looking back to-day we may claim that his far-seeing anticipations have been remarkably fulfilled; that the University has directly

* By His Excellency Sir HARCOURT BUTLER, K.C.S.I., C.I.E., Governor of the United Provinces of Agra and Oudh, on 4th November, 1922.

XXVIII—103

or indirectly gone far to revolutionize intellectual standards by the diffusion of learning, and has been largely instrumental in fostering ideas of economic progress and political emancipation. Moreover, it has raised the attainments and the tone of the great Indian services on whose capacity and integrity so much of Indian happiness depends. On this the first Convocation of the reformed University let us offer up our gratitude to those, who have preceded us and departed from us, and have made the reforms of to-day possible in the fulness of time. The list is long, but I may mention some in particular who have left behind them imperishable claims to grateful remembrance: Mr. Griffiths, Mr. Gough, Mr. Hill, Dr. Thibaut, Dr. Venis, Sir John Edge, Sir Sundar Lal and, last but not least, Sir George Knux, whose recent death we all deplore.

I need not dwell on the defects of a University organization that outlasted its original purpose, hampered the growth of a teaching system and imperilled the standards for degrees; nor need I trace at any length the stages by which we have freed ourselves from the old trammels. From the very outset Sir Alfred Lyall, your first Chancellor, in the address to which I have alluded, though he advocated the establishment of a University of the affiliating type, did actually foresee a time when it might be practicable to transform it into a teaching and residential University. If we take a true perspective, we can realize that in the beginning the University was of necessity the creative force for all secondary education, and that it had to dispense practically all higher secondary education itself; and that too for a vast area. For the jurisdiction of this University extended and still extends over two British provinces, the United Provinces and the Central Provinces, with Ajmer-Merwara and the Indian States of Rajputana and Central India and Gwalior, an area of over 450,000 square miles—about equal to the area of France, Germany, Belgium and Denmark combined—with a population of over 81 millions. The dangers of an affiliating University are many, the determination of curricula by external examinations instead of the determination of examination by the curricula, the distrust of the teachers shown by external examinations and the consequent discouragement of good men from entering the educational profession, the multiplication of subjects without much educational articulation, the lowering of standards by having

to cater for weak institutions and backward areas, and the clash of rival interests in the University itself. These dangers are more or less incidental to the system. Then the very spread of education creates a demand for new opportunities which economic and social changes afford. It became gradually apparent that the existing mechanism was overstrained by the pressure of new demands and defective in its adjustment to growing needs. Still all the time the University kept raising its standards, and improving itself and its colleges. It was one of the first to introduce regular inspection of colleges after the University Act of 1904. Indeed, it was moving towards a higher ideal of University work before that Act was passed, and many competent persons thought at the time that it was thereby rather hampered than assisted in its development. In due course, when the standard of teaching had risen sufficiently, a School-Leaving Certificate, based partly on the record of school work and partly on examination, was, with the full concurrence of the University, established and made equivalent to the Matriculation examination. The University has always been strongly represented on the Board which controlled this examination and it has supported throughout the enlightened policy which prepared the way for the final separation of secondary and higher education. Thus by constant stages of self-improvement our University has raised itself higher and higher. It now enjoys the proud distinction of being the first of Indian Universities to remodel itself on the lines laid down by Sir Michael Sadler and his distinguished colleagues in the report of

the Calcutta University Commission. Great changes are not often effected without much heat and controversy; but the result in our case has been achieved with a remarkable consensus of opinion, a result, due to the wisdom and foresight of our educational leaders, who have not permitted themselves to subordinate the common good to vested interests, however much they may have sympathized with local patriotism alarmed for the future of some cherished institution. Nor must I omit a tribute to my old friend, our Vice-Chancellor, Sir Claude de la Fosse, whose signal services to education have received high recognition from His Majesty the King-Emperor, and to the Hon'ble Mr. Chintamani, the Minister for Education, for the skill with which they piloted the necessary Acts through the Legislative Council. I deem it a great compliment and confirmation of our efforts that the older University of Madras, the boldest of Indian Universities, perhaps in educational progress, should be considering reforms on lines very similar to our own.

I ask you to reflect, gentlemen, what is involved in this the most striking educational reform of our generation. For the first time the University can confine itself to University work, and is free to develop on true University lines without dissipating its energy in the effort to control, largely on paper, higher secondary education, which has been handed over to a representative Intermediate Board. It will take some time to realize this change: to eradicate the old and limited ideas, to put new light and life and originality into our University work. The concentration of effort

involved in the new constitution will facilitate the realization of what is now recognized as essential in the West; that those engaged in University teaching should not be content to convey mere instruction of the results of research by others, but should be actively engaged in advancing knowledge themselves. For the right application of knowledge of University standard, familiarity with the scientific methods by which that knowledge has been achieved and by which progress is to be assured, is even more important than the knowledge itself. Original research postulates not only superior mental ability but also the provision of the instruments of research in laboratories, collections, libraries, etc., and, above all, leisure for the professors. This is a point on which I have dwelt in previous addresses. I would once more emphasize the importance of leisure for investigation and for quiet thought and study. It is within my knowledge that many able scholars have been lost to Indian education because they have been unwilling to be deprived of this leisure and have seen themselves, if they remained, doomed to waste their intellect and energy in a mere round of tutorial work. All modern opinion insists on the association of the teachers of professorial rank with the post-graduate and graduate classes in the common pursuit of knowledge and the cultivation of individual capacity, but there is need for a division of labour. I would urge upon you, with all the force at my command, the necessity for securing for professors adequate leisure for research, and also the importance of providing lectureships for younger men in sufficient numbers to

relieve the professors of the monotonous routine of daily class instruction. Thereby alone can you hope to attract to the service of higher education the best brains of the province, instead of compelling them for want of intellectual stimulus to drift off into other careers. Thereby alone can you give to advanced students those opportunities which at present they have to seek in Europe and elsewhere. This surely should be the object of all those who love India and wish in time to see her higher education self-contained and her Universities rivals of the best Universities of the West.

We still have an external side to justify our motto "*Quot rami tot arbores.*" In course of time that side will be diminished by the foundation of new Universities. Lucknow University is an accomplished fact. I come to you fresh from its first Convocation. Nagpur will soon have a University of its own. Agra and Cawnpore aspire to have their own Universities. Your first duty is to raise your own University standards, to teach the public to realize, what at present it does not, the difference between a University education and a University degree. But your influence over a large area will remain for some time yet, and I commend to you the example of Oxford and Cambridge in University extension lectures or extra-mural work and in the support which they are lending to local colleges in their aspirations to attain to University rank. In this way you will fulfil your original function in the diffusion as well as the advancement of learning.

We must not forget, as I said at Lucknow, that the education of under-graduates is the

main function of a University. I give you some maxims of high authority as to what that education should be. "The regular students of the University should be able to work in constant association with their fellow-students not only of the same but of different faculties, and also in close contact with their teachers." "In a University knowledge should be pursued not merely for the sake of the information to be acquired, but for its own extension and always with reference to the attainment of truth." "The first principle of philosophical, nay of intellectual, training is that all should be educed from the pupil's own mind." These ideals will now be more than ever before attainable under the revised organization of the University. But the success of no organization, however perfectly devised, rests wholly on the smooth working of its machinery. University reform in particular is not purely a matter of legislative enactment or of rules and regulations. Much depends upon the spirit in which the members of the University perform their several parts. The first essential is a feeling of corporate existence permeating both the teachers and the taught—the recognition that it is the duty of every member of the University so to act as to be worthy at all times of the society to which he belongs and to avoid at all costs the doing of anything that may smirch the fair name of his *Alma Mater*. All must keep steadily in view the promotion of a true academic life, to love learning and to pursue knowledge enthusiastically for its own sake. Endeavour to excel in whatever you undertake, whether in work or recreation and see to it that all your

activities, social or intellectual, are creditable to the great University to which you belong. You have now an opportunity, in the transformation of your University into a teaching and residential University, of living together in a common bond of learning and endeavour. I have no doubt that you will in time create traditions of work that will make you famous as a centre of scholarly attainment throughout India.

There is one matter which causes me some little apprehension, namely, a tendency to interfere with the freedom and initiative of the University from outside. The great Commission on the Universities of Oxford and Cambridge which has recently published its report—the last word on University education—while recommending the increase of annual Government grants to each University from £30,000 to £110,000 sterling, largely for extension of, research, entered a solemn warning against Government interference, which is applicable to other external interference in this country. Let me read to you their words: "That the attempt of the State to control opinion in the Universities and Colleges broke down in 1688, and was never revived, is a great fact that has distinguished our University system from that of France and Germany. It is a precious part of our intellectual and moral heritage as a nation. If there were any danger that grants of public money would lead to State interference with opinion in the Universities, it might be the less of two evils that they should decline in efficiency rather than lose their independence in order to obtain adequate means. But the ways of thought and feeling of the

modern British community are hostile to any development in the direction of State control of the academic spirit, and the public grants already enjoyed by the old Scottish and new English Universities have not led to State interference with opinion and tendency in those institutions." I trust that in this province the same thought and feeling may grow up. The decision of academic questions should undoubtedly be left to the academic body, which is doubly susceptible to University tradition and to public opinion. I am impressed by the consideration that we are at a stage when any undue interference with the University will militate against the future development not only of the University but also of the province.

Fellow-students, I am addressing you as your Chancellor for the last time. The great French moralist, Pascal, and the great English moralist, Dr. Johnson, agreed that to uproot oneself or do a thing consciously for the last time caused some sadness of heart. I feel that sadness of heart to-day. Will you bear with me a moment if, before I go, I strike a personal note? I should like to be remembered in this University, for a little while after I have left you, as one who loved India and believed in education, as one who ever sought to—

Keep the young generations in hail
And bequeath them no tumbled house.

I have known this University since it was three years old; we may almost be said to have grown up together. As Educational Secretary to the Local Government, as first Member of the Governor-General's Council for Education, and as your Chancellor I have

been in constant touch with you. I have never received anything but kindness at your hands and I am more than proud to receive the degree which you have been good enough to confer upon me. I have made many friendships with professors and students in times past and present, friendships that I deeply value and will, I trust, last to the end. For all that you have been to me, for all that you have done for me, I thank you from the bottom of a grateful heart. In bidding you farewell I pray that you may go forward in the future, as you have done in the past, raising your standards, seeking truth wherever you may find it, shedding light in the dark places that remain, and working out that synthesis between East and West which seems sometimes nearer and sometimes more remote, but which is becoming ever more important for the high enduring interests of humanity and civilization.

Third Edition (1922)—Price Re. 1-12-0.

A COURSE OF GENERAL MATHEMATICS FOR HIGH SCHOOLS

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

By V. RAGHUNATHA AIYAR, B.A., L.T.

Assistant, Teachers' College Saidapet.

Crown 8vo. 400 pages with over 195 diagrams

Approved as a Text-book for Schools under Public management,

vide Fort St. George Gazette, Part I-B, p. 641, dated 21-6-21.

Approved as a Text-book suitable for school use,

vide Fort St. George Gazette, Part I-B, p. 877, dated 21-9-21.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

A MEMORANDUM ON EXAMINATIONS.*

It is a well-known fact that whatever may be the courses of studies in our schools and colleges, examinations exercise an effective control over the work in those institutions. The Calcutta University Commission in summarising the evidence before it on this point has written that "The teaching is compressed tightly into the limits of the examination syllabus by the overwhelming anxiety of students to pass their examinations and of teachers to ensure their success." What is true of Bengal is equally true of other parts of India as well. [It is not our intention to go into the causes such as economic pressure, etc., that lead to this state of affairs. They are discussed by the Calcutta University Commissioners in their Report, Vol. II, pages 148-149 and pages 153-155.] Further, examinations, both directly and indirectly, form the basis of recruitment to our public and other services and have thus a bearing on the efficiency of services and indirectly also on national efficiency. Moreover, throughout the country, in Madras at any rate, there is raised every year a loud complaint about the large failures in the Public Examinations even though the candidates are declared fit to appear for the examinations by the schools and colleges. Hence, it will be conceded that the problem of examination requires a systematic study and a scientific investigation. It is as a preliminary to such an investigation that this memorandum has been prepared.

In such a memorandum, it is hardly possible to do much more than raise the questions

* (1) Read before the Annual Educational Conference of the Madras Teachers' Guild, held in December 1922.

(2) The authors are indebted to Prof. E.B. Ross, of the Madras Christian College, for valuable suggestions.

to be discussed; in one or two cases, namely, the principles of marking in written examinations and the methods of standardisation of such examinations conducted on a large scale, work already done by the authors is offered as a sample of the problems and the methods available for solution.

It requires only slight reflection to recognise that the function of examination is not single but at least two-fold, viz., to test knowledge and to test general ability or intelligence. It may further be evident that these two functions are not entirely independent of each other; for, ability cannot mature without increasing knowledge and the acquisition of knowledge varies with ability. Still, each has its own individuality.

If the function of examination were merely to test knowledge, the problem of examinations would become considerably simpler. Even then, there would be some difficulty due to the fact that examinations, particularly, written examinations, really measure knowledge only in an indirect and imperfect manner. What they mostly measure is, as Edgeworth points out, possession of a perhaps temporary knowledge acquired at 'Examination Pressure' using the power of cramming to a large extent.

As regards the function of examination to test general ability and intelligence, very little has been done in India to adapt the methods of examination to this end. In fact it is only in recent years that attempts are being made in other countries to investigate the practical

† Cf. *Journal of the Royal Statistical Society*, Vol. LI—1888.

cability of making examinations perform the second function directly. Intelligence tests like those of Binet-Simon with later modifications,* are evolving out of those attempts, with a very limited and inadequate range of application. In fact, the tests have been worked out in India, so far as general educational purposes are concerned, only to suit pupils up to 12 years of age or so and even here they have not yet received universal approval. The extension of these tests to lads at the adolescent age is beset with far more serious difficulties and it is a direction along which considerable investigation is being made and it may be very long before the tests are satisfactorily standardised and universally accepted. In the absence of suitable standardised intelligence tests, the partial dependence of knowledge and ability is to be taken advantage of and the knowledge tests have to be made to serve a double function, namely, to test knowledge and to test intelligence.

Thus, there are two main difficulties in our present-day examination systems, viz., (1) Absence of standardised intelligence tests to suit those that have passed the lower secondary stage and the consequent double function thrown upon knowledge tests, and (2) The knowledge tests employed having a tendency to measure the power of cramming, rather than real permanent knowledge. There is still another complicating factor, namely, the weights that must be attached to the results of the knowledge tests as such and intelligence tests as such and also the proportion in which questions intended to test them are to be given in

* E.g., Bulletin No. 15 of the Teachers' College, Saidapet, contains adaptation of the tests to South Indian conditions, by Miss Gordon.

an examination. The determination of the proper weights and of the proper proportion depends to a great extent upon the purpose of the examination.

From the point of view of purpose it may be possible to recognise three broad classes into which examinations fall: general educational, competitive and professional. Of these, professional examinations may be said to have in their very nature a fairly well-defined purpose. They are further taken by persons who are already adults. It is only the possession of definite knowledge and of definite practical skill that is tested in such examinations, greater importance being given to knowledge tests; consequently, the above-mentioned difficulties, in respect of such examinations can be overcome to a great extent, provided their well-defined purpose and function are borne in mind. It is the first function that predominates in the written parts of such examinations.

In the case of competitive examinations, as for higher Civil Service, no special knowledge is tested. If knowledge is tested it is more as an indirect method of measuring general ability, than for its own sake. It is the second function that ought to predominate in such examinations.

In the case of general educational examinations the purpose is often manifold and generally ill-defined. In the case of the S. S. L. C. of Madras, for example, there are at least three purposes, which are distinct from each other: (i) it serves to mark the successful completion of the school education; (ii) it serves as an entrance test to University study; (iii) it serves as a test for entrance to the lower services such as 'civil', 'commercial', etc. This multiplicity of pur-

pose is a source of many difficulties in the conduct of general educational examinations. The question whether the inconvenience of distinct examinations for the several purposes is not outweighed by the advantage of each having a single purpose demands grave consideration. In this connection the practice that obtains in other countries will have to be studied. If it is necessary to have only one examination with many different purposes the means of reducing the evils due to having many purposes to a minimum must be investigated. At present, public opinion does not seem to have realised the difficulty due to multiplicity of purposes in our general examinations, as is evident, for example, in the indiscriminate condemnation and ill-informed criticism of the S. S. L. C. Examination of Madras and the "Eligibility List" published by the University on the basis of the S. S. L. C. The chief misapprehension seems to be that a candidate is an absolute failure if his name is not in the "Eligibility List" and the criticism takes the form "that the average student is failed." The real situation is however different. The average school-boy cannot be said to have failed, so far as the successful completion of the school-course is concerned. For this purpose, the average school-boy and even some of those that are not very much below the average may well be deemed successful. But the position is entirely different from the point of view of University entrance. For it is undesirable from the point of view of economy both of money and of effort, where the University organization is maintained out of public funds to any large extent, to admit under-graduates who have little or no prospect of successfully completing the University course. In this case therefore admission cannot be granted freely to all who are ready to try their luck. The standard of

attainment required for this should be higher than that reached by the average school-boy when he completes the school-course. In addition to intelligence, at least average, and the reasonable requirements necessary for the completion of the school-course, the University is entitled to demand of its under-graduates certain technical abilities not so necessary in ordinary life. These may be summed up in (1) familiarity with literary English,* spoken and written, (2) capacity to follow abstract reasoning.

Though the purpose of a general educational examination cannot, by its very nature, be sufficiently well-defined, yet it is necessary and desirable to formulate and specify its purpose as definitely as possible so as to serve on the one hand, as a direction to the examiners in framing the question papers and on the other, as an indication to the public as to what a pass in such an examination connotes.

Having thus indicated the inherent difficulties in examinations and the additional difficulty due to multiplicity and indefiniteness of purpose, it would be of use to enumerate the necessary criteria that all examinations must be made to satisfy—criteria that have been so clearly formulated by P. J. Hartog in his book on "Examinations." (pp. 53-54.) Examinations are similar in purpose to physical tests (by "physical tests" is meant, tests measuring physical, chemical, etc..... characteristics as opposed to mental characteristics) and hence examinations must also be made to satisfy the same criteria as these tests:—

* Either English or that language which is the medium of instruction in the University.

(i) the test must give a suitable numerical measure of the characteristic tested;

(ii) the test must be trustworthy and must give the same results when repeated by different observers and when repeated by the same observer;

(iii) since the whole of the characteristics cannot be tested, the sample tested must be fairly representative of the whole;

(iv) the characteristic tested should be of a permanent or quasi-permanent nature;

(v) the application of the test should not injuriously affect the characteristic or the material.

Next as regards the form of examinations, there are four well recognised forms—written, *viva-voce*, practical (including clinical and library), school-record. The relative advantages and disadvantages of these forms are to be determined in the light of (1) the adaptability of the form to meet the above-mentioned difficulties of examination systems; (2) the criteria of examinations; (3) practicability, which has to take into account the number of candidates examined, number of centres of examination, etc.

Taking the case of school-record, given an ideal teacher, the use of school-record may eliminate many of the difficulties of examinations. It can be made to satisfy almost all the criteria except the second. But, an ideal teacher is not to be had. Further, when a large number of candidates are involved, one has to take into account the estimation of many teachers which would destroy the uniformity of the test. Hence, the school-record cannot be resorted to as a very satisfactory form of examination. However it will be very useful, as will be pointed out

later on, to supplement other forms of examinations.

As for practical examinations, though they can be made to perform the second function satisfactorily, with respect to

the first function, namely, testing knowledge, it is almost impossible to make this form of examination satisfy the third criterion, *viz.*, fairness of sample, on account of the practical necessity for restricting the duration of such examinations to a few hours—say three to six. Even regarding the second criterion, the probable error due to personal equation, etc., in the estimate of the performance is likely to be large. Again, when the number of candidates is very large, the management of the examination would become unwieldy and several examiners would have to be employed and there would also be the difficulty of co-ordinating their work. In view of all these difficulties this form of examination cannot be relied upon entirely. However it constitutes a necessary form in most of the professional examinations, where we have comparatively fewer candidates and it may be used to supplement the results of written examinations to a certain extent.

Regarding *viva-voce* examinations they can be made to meet the inherent difficulties of examinations, but it is very difficult to make them satisfy criteria (1) and (2). They are also far from being practicable, when the number of candidates is very large. But, they are capable of being made to satisfy criteria (3) and (5) by suitable adjustment and selection of questions on the spot. Hence, in examinations, where the number of candidates is comparatively small, they can be made to supplement the results of written

examinations especially to make up for the deficiency of the latter in satisfying criteria (3) and (5), and in testing ready-resource and mother-wit of candidates—qualities which are required in many of the public services.

Regarding written examination, though it has its own limitations, one very important factor in its favour is that it is the only form of examination that is practicable when a very large number of candidates is involved. Even when only a small number is involved, it has some advantages over other forms, since, of all the forms, this is capable of being made to satisfy criteria (1) and (2) to a very great extent. One of the means of making this form satisfy the criteria of tests depends largely on the principles and methods of paper-setting and of marking. Hence we pass on to these two important questions.

In setting papers, the purpose and the two functions of examinations must be borne in mind. In the general educational examinations, it is very important to have questions to test knowledge and to test general ability. Questions, intended mainly to test general ability may be made to appear in each paper or they may be put in separate papers. And, to make such questions satisfy the third criterion, *viz.*, fairness of sample, ample choice of questions may have to be given. It must be one of the functions of the "Examinations Board," the formation of which is suggested towards the close of this memorandum, to investigate and find out the most suitable type of questions that would perform this second function and also to determine the most appropriate extent of choice that must be allowed.

One danger of standardised examinations is that questions may very soon get stereotyped and it may be possible for unintelligent cramming to take advantage of this. Although there may be much truth in the statement "that it is not possible to defeat crammers under any system of examinations that can be devised,"* still, ways and means must be found to reduce the special advantages of crammers to a minimum. The "Examinations Board" must constantly review the question papers and take steps to invent continually fresh types of questions in order that the tests may be efficient, reliable and not completely evadable by methods of memorisation. That such a thing is possible is reported upon by Stanley Leaths Treasury Committee on the Civil Service (Class I) Examinations.† The recognition, in England, of the necessity for and the possibility of such a line of action is evidenced, for example, by a recent report in the "Mathematical Gazette."‡

Next, as regards questions testing knowledge in written examinations, one method of

* Evidence of the Hon'ble Mr. R. P. Paranjpye—Calcutta University Commission Report, Vol. X, page 191.

† This report was published in 1917 by H. M. Stationery Office.

‡ The issue of July 1922 (Vol. XI, No. 159) contains on page 131, the following:—"General Teaching Committee.

The Committee.....passed the following resolutions:—

Examination Questions.—That a Sub-Committee be appointed to consider criticisms of mathematical questions set in Public Examinations.

Examination Questions Sub-Committee.—The members of the Sub-Committee appointed to consider criticisms of examinations are: Miss M. (Haurat, Scarborough High School; A. W. S. (Idons, Hendalls, Harrow-on-the-Hill; W. J. Dobbs, 58, Priory Road, Hampstead, N. W. 6.

Examination questions on Pure and Applied Mathematics within the school range, if open to criticism, should be sent with comments to one of the above."

making them satisfy the third criterion, *viz.*, fairness of sample, is to prescribe a definite and detailed syllabus in each subject and to make the papers sufficiently representative of the syllabus. Since, as has been suggested in the previous paragraphs, special questions or special papers are to be set to test general ability, it need not be feared that a detailed syllabus will adversely affect general studies.

Further care must be taken that the questions set are in nature and quality such as to secure the purpose of the examination.

As to making written examinations satisfy the fifth criterion, *viz.*, the test should not injuriously affect the material or the characteristic tested.

There is need for experimental investigation of (1) the duration and time-scheme of examinations with reference to fatigue, (2) compartmental *versus* a single final examination, (3) external *versus* internal examiners, and (4) reducing the number of subjects for the public examination, although the course may include many. The "Examinations Board" must go into all these questions. The third of these items is being experimented upon in Madras in the case of the S. S. L. C. which includes a group of subjects (called B Group) which are not examined upon. Already there is a loud complaint that the B Group subjects are not attended to by pupils and it is demanded that those subjects also should be included in the list of subjects for the public examination. It is necessary to make a careful study of the difficulties experienced in the actual working. The institution of the B Group should not be hastily given up altogether in response to this clamour and in despair. Some of the means of rendering the system effective are (i) to create and maintain a public opinion among the teachers themselves regarding the necessity for the system, (ii) to

make the general public realise its advantages, (iii) to make the institutions pay adequate attention to these subjects by effective inspection work, and (iv) to finish the B Group subjects one year before the pupils appear for the Public Examination.

To make written examinations satisfy the first two criteria, proper attention must be paid to the principles and methods of marking.

To begin with there is the difficult question of the method of marking to be adopted—whether the answers to a question or to the entire paper should be judged as a whole or whether mark should be given for every little point scored or whether a mixture of the two methods should be used. This question is beset with many serious theoretical and practical difficulties. It has been dealt with elaborately by the Calcutta University Commission.* The "Examinations Board" will have to investigate this point from time to time and conduct the necessary experiments.

Next, to make the examination satisfy the second criterion two very important points have to be considered. First it is well-known that in taking measurements in experiments as well as in assigning marks in an examination, it is not practicable to get at the true value. It is in recognition of this that in experimental work whenever a numerical measure is given the probable error also is usually given, *e.g.*, $5.36 \pm .015$ inches. This practice lets one know within what limits the result is trustworthy. It is very necessary to ascertain the probable error in the case of examination marks also.

* Report, Vol. II, pp. 161–174.

The determination of the probable error is one of the most important problems that have to be taken up by the "Examinations Board."

The following which bears on this question is taken from an article contributed by the authors to the *Journal of the Indian Mathematical Society* (April 1922):—

"Professor Edgeworth has discussed this problem rather fully and has given the following results as his considered opinion based on several inquiries and experiments conducted with the aid of a number of examiners. In the absence of similar elaborate investigations pertaining to Indian conditions, we are justified in adopting his results.

"The causes for the probable error in marking have been analysed and brought under five heads:—

(i) Minimum sensible:—"Error due to the difference of perception of excellence whose magnitude varies with the subject being least in Mathematics and perhaps greatest in Composition. Where subjects are for the most part of the simpler sort, it will perhaps be sufficient to allow for this source of uncertainty a probable error of 5 per cent. on the mark for each answer." We may take it that Mathematics is a subject "of the simpler sort." In the case of the other subjects, the error due to this cause is bound to be higher. Properly speaking we must determine it by actual experiment for each subject. It is observed that in a subject in which we expect this error to be great the standard deviation is smaller. We have taken 7 per cent. as the error in Physics and Chemistry, 10 per cent. as the error in English and History.

(ii) Personal equation: "10 per cent. on the mark of each answer."

(iii) Difference in the scale adopted by the several assistant examiners: "4.5 per cent. for each paper."

(iv) Fatigue of the examiner: "1.5 per cent. for each paper."

(v) Speed in valuation: "25 per cent. on the mark of each question".*

"To find the aggregate error in each subject due to all these causes we have to take into consideration (i) the number of papers in the subject, and (ii) the most probable number of questions, in each paper, that will be attempted by the candidates who are in the border line between pass and failure. This has to be decided only by the experience of examiners. We have made the following assumptions for the examination the results of which we are considering:—

English	I paper	5 out of 7 questions.
	II "	4 out of 5 "
	III "	3 out of 3 "
	IV "	3 out of 3 "
Total		15
Mathematics (two papers) 5 out of 7 or 8 questions.		
Physics	"	5 out of 6 questions.
Chemistry	"	4 out of 5 questions.
History	"	5 out of 5 questions.

On this assumption, and neglecting the error due to speed, we get by the usual for-

* It must be borne in mind that this high percentage is suited only to cases where about 200 to 300 papers are to be valued in 2 or 3 days. But, in Madras examinations, where only about 80 to 100 papers are expected to be valued per day, this co-efficient will be very much smaller.

† The reason for dealing only with border line candidates is explained later on (page 12).

mula for the aggregate probable error due to all these causes, the following percentage of the marks earned by a border line candidate :—

English	Mathematics	Physics	Chemistry	History
4.4	4.8	5.1	5.1	5.8

“Going back to the illustration we have already taken, *viz.*, English and Chemistry in the 6th year, the adjusted minimum in those subjects, less the probable error, comes to 35.3 per cent. and 30.7 per cent. respectively. Consequently taking the maximum in these subjects to be 300 and 100 respectively, all those that get 106 in English and 31 in Chemistry must be passed. To bring out the real significance and importance of these two adjustments, it may be mentioned that in the year under consideration, out of 500 candidates, about 50 more would have passed in each of the subjects, English and Chemistry, if the marks had been moderated as suggested. Taking both the subjects together about 30 more would have passed. If the adjustment were made in the other subjects also, there would no doubt be some more addition to the number of passes.

“In the above calculation of the probable error, it has been assumed that the valuation of the papers was done very leisurely without allowing any error due to speed to creep in. If, however, this assumption is not tenable, we must make allowance for speed also, that would still further increase the probable error. The percentage in English, for example, works out to be 7.8 per cent. of the marks earned by the candidate.

“Besides these errors due to valuation, there is still another error, *viz.*, that due to the intrinsic variation in the performance of the candidate. The idea of this is as follows :—

Two question papers are adjusted to be identical in standard so as to produce the same mean and standard deviation. A candidate tries both. He will not, even under any ideal system of marking, get the same mark in each. If he took a large number of such papers, there would be a standard deviation in the marks earned.” The margin of error that must be allowed for this source has not been investigated.

It is highly necessary that Edgeworth's experiments should be repeated in this country with the necessary modifications and the co-efficients of probable error due to the various causes should be re-determined for future use. In doing this, the “Examinations Board” will require the co-operation of many experienced examiners and of a skilled statistician.

Secondly, the work of different Assistant Examiners will have to be co-ordinated. One step that must be taken, and that is usually taken, from this point of view, is that the Chief Examiner must give suitable instructions for valuation to his assistants. But such instructions should not be too elaborate and detailed.—For, otherwise, the assistant examiner may be forced to give marks for part-answers of an imperfect and scrappy nature, and these fractions of marks when added together, may often come up to the minimum pass-mark, though the general quality of the work, as a whole, may not deserve a pass. Such instructions may also have injurious effects on paper-setting, on the methods of teaching and on the mode of study by the student.—It is further necessary also that the Chief Examiner should value a few papers in

the presence of his assistants so that the same scale and standard of judgment may be adopted by all the assistants. These two steps are necessary but are far from being sufficient. For, it is a matter of experience that, in spite of such definite instructions, all assistant examiners do not usually give precisely the same mark for a given piece of work. The question is how to make up for this difference. Here again the statistician comes to our aid. If the means and the standard deviations of the marks assigned by the several assistant examiners differ widely, as they do in practice, either the papers must have been *unevenly* distributed to the assistants, *i.e.*, all good papers must have gone to one and all bad ones to another and so on, or there must have been intrinsic difference in the valuation of the several assistants or both the causes may have co-existed; to simplify the matter, care must always be taken to distribute the papers *evenly* among the assistants and it must be one of the functions of the Chief Examiner to secure evenness of distribution and to test whether it has been realised. One method for securing evenness will be to arrange the candidates in alphabetical order and divide them into equal groups. But, this may be impracticable, when there are a number of centres for the examination. Hence, the following second method is suggested. From the experience of some definite period of years, say 3 years, immediately preceding the time of the examination, the centres may be arranged in order of proficiency and grouped into a convenient number of classes. A suitable number of centres from each such class may be made to send the answer books to each assistant examiner. Finally, to test whether evenness of distribution has been secured by this means, the Chief Examiner

may revalue a few sample papers from the bundle of each of the assistants.

If the first cause is thus eliminated the difference due to the second cause can be made up for in the following way :—

During the first few years, *i.e.*, until experience is gained, the average of the means of the several assistants can be taken to be the proper mean. Similarly, the average of the standard deviations can be taken to be the proper standard deviation. After some experience is gained, the Chief Examiner will be able to determine the proper mean and the proper standard deviation without reference to the assistants' work. Then the working rule for adjusting each mark so as to avoid this type of error is as follows * :—

(1) Add to each mark the excess of the proper mean over the actual mean (of the assistant's bundle to which the particular paper belongs).

(2) Increase the distance of each thus transformed mark from the proper mean in the ratio of the proper to the actual standard deviation, *e.g.* if the actual mean of an assistant examiner's bundle is 36 and the proper mean is 40, the actual standard deviation 10 and the proper standard deviation 12, and if a candidate gets 30 marks the reduced mark is by (1) 34 and by (2) $40 - 12/10 (40 - 34) = 33$.

If he gets 50, the reduced mark is by (1) 54 and by (2) will be $40 + 12/10 (54 - 40) = 57$.

If necessary these calculations can be effected by a suitable graphical method.

* See also Edgeworth's article in the *Journal of the Statistical Society*, Vol. 51.

The next point to be investigated is how to Standardisation make the test employed in of the test, an examination have a uniform standard from year to year.

The result of a preliminary investigation of this question is extracted here from the Journal of the Indian Mathematical Society. (April 1922) and the "Examinations Board" must go into this question more fully.

"Material and Method.—The material on which this study is based is taken from the register of the marks assigned in a certain public examination in English, Mathematics, Physics, Chemistry and History in six consecutive years. Since the number of candidates was large, the authors have considered only the marks of the first 500 candidates, which may well be taken to be a satisfactory random sample. * *

"The intervals employed for grouping the marks cover a range of 5 marks, and the ends of intervals are so chosen that the minimum for a pass in each of the subjects falls in the centre of each interval. Hence any moderation, that might have been made by the examiners in the neighbourhood of the minimum, will not have any effect on the main results of the investigation. * * *

Results.

"The main constants—the median, the mean and the standard deviation (reduced to a maximum of 100)—for the various years and subjects are tabulated here. They are also represented graphically in Figs. II and III. As may be expected, the standard deviation is more stable than the mean.

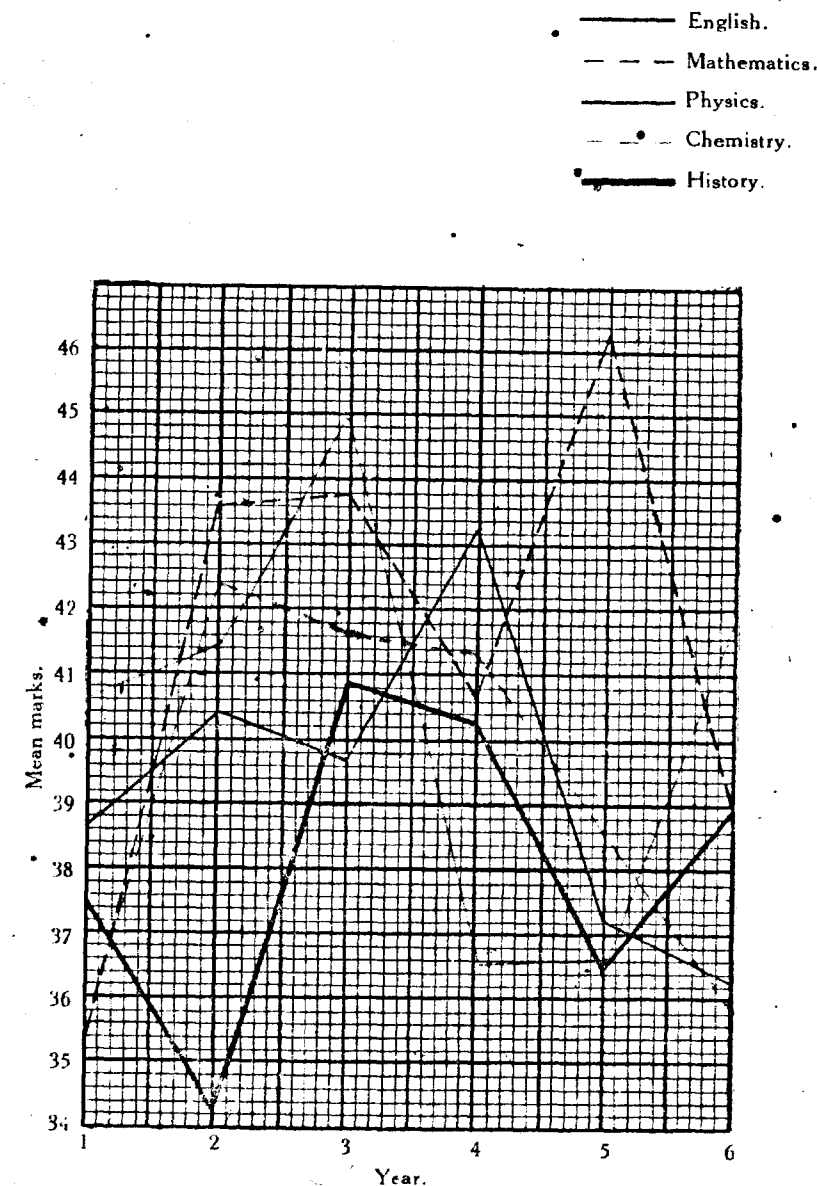
	Year	Median.	Mean.	Std. Deviation.
English.	1	38.1	38.7	9.15
	2	39.7	40.4	9.33
	3	38.9	39.7	9.16
	4	42.3	43.2	10.15
	5	37.3	37.3	9.43
	6	35.8	36.3	8.31
Mathematics.	1	34.6	35.3	13.67
	2	42.4	43.6	13.22
	3	42.2	43.8	12.89
	4	39.6	40.7	12.32
	5	45.3	46.3	13.65
	6	37.0	39.0	13.64
Physics.	1	40.1	40.6	14.43
	2	41.7	41.4	11.12
	3	44.8	44.9	11.65
	4	36.0	36.4	11.57
	5	36.1	36.5	11.06
	6	41.1	41.7	12.07
Chemistry.	1	...	35.8	14.34
	2	42.7	42.3	12.10
	3	40.5	41.6	11.83
	4	41.0	41.2	12.92
	5	37.9	38.4	13.69
	6	35.8	35.7	10.12
History.	1	37.1	37.5	7.95
	2	31.6	34.3	7.61
	3	40.3	40.9	9.93
	4	39.5	40.3	8.84
	5	37.0	36.4	8.29
	6	39.2	38.8	8.96

DISCUSSION OF THE RESULTS.

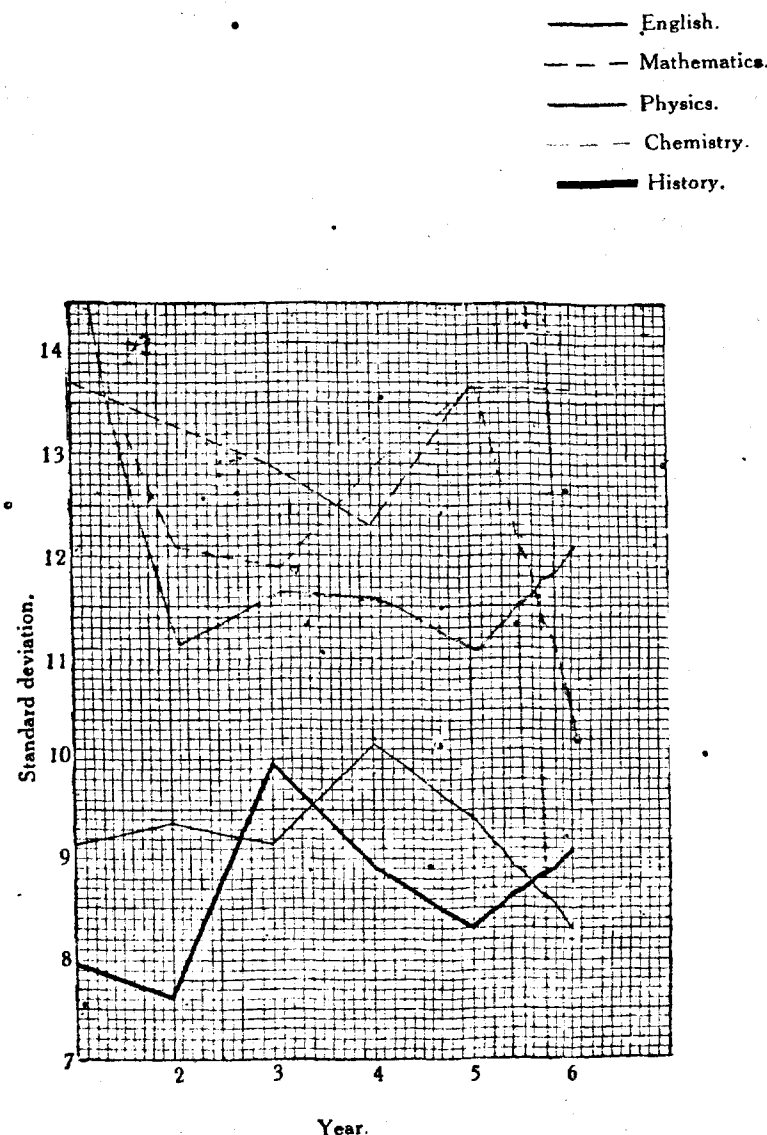
I. Adjustment of the Minimum.

"It now remains to consider certain very important problems suggested by the numbers given in the foregoing table. Figs. II & III bring out prominently the fluctuations in the mean and in the standard deviation of the marks. These fluctuations cannot be due to "Probable Error" alone. For, from Table V of Karl Pearson's "Tables for Biometricians and Statisticians," for the size of the population considered, we get for the probable error of the mean .03016 times the standard deviation and for that of the standard deviation .02133 times the standard deviation. Now, in the cases considered, the

FLUCTUATIONS OF THE MEAN.



FLUCTUATIONS OF THE STANDARD DEVIATION.



DEC. 1922.]

A MEMORANDUM ON EXAMINATIONS.

71 2257

standard deviation does not exceed 14.5. Hence, we get for the greatest possible probable error .42 in the case of the mean and .31 in the case of the standard deviation. But, the actual fluctuations are considerably beyond these limits. Hence, we have to conclude that they may be considered as real fluctuations.

"On the other hand, it can be assumed* as a very convenient and highly reasonable hypothesis, that the average intelligence as well as the dispersion of intelligence of candidates is measured respectively by the mean and the standard deviation of the marks in the several subjects, will be constant from year to year. If the observed fluctuations in the mean and the standard deviations are due to variations in the average intelligence, they will be similar in the various subjects. But the Figs. II and III indicate no such similarity. Hence these fluctuations can be attributed mainly to fluctuations in the standard of the examination as determined by the difficulty of the question papers, the stringency of the marking, etc..

"It may be urged that these fluctuations may also be due to sudden changes in the efficiency of school-training due to the change in the Regulations. Then the preparation of the candidates and the exami-

* In the case of the S. S. L. C. and the Intermediate examinations, in which thousands of candidates appear, the mean intelligence is not at all likely to fluctuate. It is very likely to be constant, if there are no special disturbing causes, and these are not very frequent. At worst, there may be some slight movement, whose effect may become perceptible only after accumulation over several years. It is just to take account of this that it is suggested later on that the mark corresponding to mean intelligence may be taken to be the average of the mean marks for a number of years, say six, immediately preceding the year considered, as is done in Meteorological statistics.

nation papers have to fit one another as a key fits into a lock. Whether this fact can explain the fluctuations to a large extent, can be finally decided only by carrying on the investigation for a further period of, say, 5 or 6 years preceding and succeeding the year in which the changes in the regulations were introduced.

"Now in order that the worth of the candidates may be judged, from year to year by an equitable and uniform standard it is highly desirable that suitable adjustments of the marks of the candidates should be made every year based upon the deviations of the mean and standard deviation of the marks for the year from what may be deemed to be their normal values. For these normal values, we can take the average of the mean and the standard deviation for a number of consecutive years, as is done in meteorological statistics.

"1. The normal mean and the normal standard deviation, as determined by the average for the six years considered are given here for reference:—

Table II.

	English	Maths.	Physics	Chemistry	History
Normal Mean.	89.8	41.5	40.8	39.1	38.0
Normal Standard Deviation.	9.26	13.23	11.98	12.5	8.6

[Note.—If the marks of the candidates are entered in their certificates, a better plan will be to enter the adjusted marks instead of the actual marks. In practice the actual marks are entered side by side with the mean. Entering the mean also is no doubt an improvement. But still this is not suffi-

cient for two reasons: (1) the adjustment due to the fluctuation in standard deviation is omitted: (2) there is a tendency in the layman to judge a candidate by the mark that is entered as earned by him without comparing it with the mean that is entered by its side. Perhaps a simple illustration will make this clear. Suppose in a certain year the mean is 46 and a candidate earns 40. And in another year the mean is 33 and a candidate earns 36. There is, we believe, a tendency in the public to be carried away by the fact that 40 is greater than 36 and conclude that the first candidate is better than the second, which is not true. At any rate, it can be said that it would be much safer to enter the adjusted mark instead of the mean, and it would not involve a prohibitive amount of work.]

"In the case of the examinations where marks are not entered in the certificates it is not necessary in practice to make the adjustments in the marks of each candidate. Since the candidates are generally divided into three classes, namely, the first class containing those that get, say 60 per cent. of the marks, the second class containing those that get an ordinary pass, and the third class containing the failure, and since the really serious question (except perhaps in the case of the top-men) is into what class a particular candidate falls and not so much what his rank is in that class, it would be sufficient if the minima for the first class and the second class are suitably adjusted.

"The adjustment of the minimum for a pass is discussed here in detail. The minimum for a first class may be similarly adjusted. Let us take as an illustration the case of English. The minimum prescribed for a pass is 40 per cent. Now it would be equitable to insist

every year upon a candidate getting 40 per cent., only if the mean and the standard deviation of the marks continue to be the same from year to year. If, however, they deviate, in any particular year, from their normal values, as they do in practice, the equitable minimum must be fixed a little higher or lower as the case may be. Thus, take the 6th year out of the years considered by us. The actual mean in that year is 36.3; but the normal mean is seen from Table II to be 39.3. We have assumed the average intelligence to be constant from year to year, and so this deviation of 3 from the normal may be taken as due to the over-strictness of the examination that year. Since the average candidate has been given 3 marks less in this year, we must reduce the minimum for a pass also proportionately. The minimum and the normal mean are practically the same, and as a result of this adjustment the minimum should be brought down from 40 to 37. Further the normal dispersion of the marks corresponds to a standard deviation of 9.26 whereas the actual standard deviation in the year is 8.31. This means that there has been more than normal crowding about the mean, i.e., each candidate has been put a bit nearer to the mean to the same extent. Hence the distance of the reduced minimum, viz., 37 from the actual mean must be decreased in the ratio of 8.31 to 9.26, which gives as the final adjusted minimum 36.93 per cent.

"A similar adjustment in Chemistry in the 6th year would bring the minimum from 35 per cent. to 32.88 per cent. and in the case of Mathematics in the 5th year the minimum would be raised from 35 to 39.60 per cent.

"The working rule for the adjustment of the minimum may be enunciated as follows:—

DEC. 1922.]

A MEMORANDUM ON EXAMINATIONS.

799
287

"Add the excess (or proportionate excess if the normal mean is not very near the minimum) of the actual mean over the normal mean to the prescribed minimum. Increase the distance of this result from the actual mean in the ratio of the actual standard deviation to the normal standard deviation. Instead of adding the excess of the actual mean to the minimum, we may also increase the minimum in the ratio of the actual mean to the normal mean. There will not be much appreciable difference between the results got by these two methods, in the cases that we are considering, where the normal mean is very near the minimum.

III. The Fixing of the Minimum.

"Then comes the problem of fixing the minimum for a pass. The fixing of the minimum appears to be very arbitrary at present. The arbitrariness is brought out by a comparison of the minima in the various subjects with the respective means. We have the following figures in percentages:—

	English	Maths.	Physics	Chemistry	History
Normal Mean ...	39.3	41.5	40.3	39.1	38
Minimum	40	35	35	35	35

"It may be seen that for a pass less than average intelligence is demanded in Science and History, whereas slightly more than average intelligence is demanded in English. To appreciate the effect of this, we have to recollect that Table I shows that the median is practically the same as the mean, that is to say, roughly about 50 per cent. of the candidates get less than the mean. In almost all the subjects, so that fixing the minimum at 40 per cent. in English would mean the failure of

slightly more than 50 per cent. of the candidates. Whereas the minimum of 35 per cent. in the other subjects implies the failure only of 40 to 25 per cent. in those subjects. Is this difference intentional? Is it necessary to maintain it? These questions may well engage the attention of the authorities and others interested.

"There is also one other very important aspect of this question; an inspection of Table I will bring out the fact that the standard deviation in English is much lower than in other subjects and consequently also the frequency curve is very steep in the neighbourhood of the mode which is very near 40% in most of the years. This means that a greater number of candidates lie in the interval 35 to 40 in the case of English than in the case of the other subjects. Hence, if only, the same amount of intelligence is demanded for a pass in English as in the other subjects a good many more should be transferred to the pass list.

"A proper method will be not to have an arbitrary fixed minimum but to define the minimum to be the mark that is at a prescribed distance from the mean, since, by assumption the average intelligence which is measured by the mean is constant from year to year.* Now, the question is what should be this prescribed distance. In fixing this distance, the fact that the median is very close to the mean in those examinations must be taken into considera-

* This view is supported and advocated also by Prof. G. H. Bryan, Sc.D., F.R.S., in his article on "Examinations" in the *School World*, June 1910, page 212, where he says: "the proper land-mark (in the scale of marks) is the average mark. The work of the best candidate necessarily fluctuates from year to year, whereas the attainments of the average candidates remain much more nearly constant."

sion. If we fix for the minimum, the mean, it is implied that 50 % of the candidates are to be declared unfit for a pass. Unless there is something wrong with our methods of instruction or with the nature of the candidates admitted for the courses of instruction, is it reasonable, or is it necessary to provide, in fixing the minimum, for 50 % of the candidates to be declared as failures? Fixing the minimum as 5 % above the average (or some such thing) will make the position still worse. This is a problem that requires careful consideration and discussion. It is also highly controversial inasmuch as the prescribed minimum and the average mark may interact upon each other. Further, this method may introduce the danger of the backward and inefficient institutions pulling down the average unless care is taken to see that only deserving candidates are sent up for the public examination. Hence, it is necessary to see that the attendance-certificates are made something real and this could be effected by inspecting the proportion of passes from different institutions and calling for the question papers and the class marks of the worst institutions."

There are also certain other points connected with the use of marks. On account of the existence of probable error, in all cases where the candidates are arranged in order of proficiency, it may not be significant to give different ranks to candidates whose marks differ by less than twice the probable error that is appropriate to that neighbourhood. The practice of some examiners, unfamiliar with this idea, who distinguish the ranks of candidates who may differ by only one per cent. of the marks is wrong in principle; even in long examina-

tions, two per cent. is only just sufficient to justify a difference in rank.

Again it has been pointed out that it is very difficult and almost impossible in the process of the calculation of the probable error, to take into consideration the effects of the "intrinsic variation" of the candidates themselves, which may be due to an infinity of unanalysable causes. The overlooking of the error due to this cause is bound to have a serious effect resulting in unequal treatment of border line candidates. One means of overcoming this difficulty is to utilise the results of the other forms of examinations, particularly *viva-voce*, if the number of candidates is small. Or recourse may be had to the use of the school-record of such candidates, as in the case of the S. S. L. C. of Madras. In the S. S. L. C. scheme the public examination-marks of all the candidates are moderated with the aid of the school record. This does not seem to be necessary. It would be sufficient if the moderation is effected only, in the case of the border line candidates. Again the best form of moderation has to be worked out. The procedure adopted in Madras seems to make it possible for the institutions to so manipulate the school-record as to evade the purpose of moderation. There is also a complaint that a border line candidate, if sent up by a good school, is sure to gain by the moderation used and has a good chance of coming out clearly above the border line while, on the other hand, if he is sent up by a poor school, the moderation acts adversely and he is pulled down. This is a very complicated problem, which deserves consideration by the "Examinations Board."

In the course of this memorandum, various points have been raised that require careful and constant investigation and supervision. It may be useful to collect all these points:—

(1) Invention of suitable types of questions to test the general ability of the candidates and to secure the purpose of the examination.

(2) Continual invention of fresh types of questions, so as to evade crammers as much as possible.

(3) Periodic review and criticism of the question papers set.

(4) The determination of the extent of choice that may be allowed in the various papers.

(5) The duration and time-scheme of the examination with reference to fatigue.

(6) Compartmental *versus* single final examination.

(7) Ways and means for reducing the number of examination subjects without the subjects omitted from the examination getting neglected by the schools.

(8) Methods of marking.

(9) Experimental determination of the co-efficients of probable error due to various causes.

(10) Methods for the co-ordination of the work of several assistant examiners.

(11) Standardisation of examinations (i.e. making up for the unavoidable fluctuations in the standard of examinations.)

(12) Fixing the minimum for a pass, etc.

(13) The best way of using a school-record, etc., for moderating examination marks.

(14) Institution of intelligence tests suited to various ages and the determination of the correlation between marks in examinations and the results of intelligence tests.

(15) Periodical statistical audit, so to speak, of the working of the examination system.

To investigate all these problems connected with examinations and for periodical inspection of the working of the examination system, the creation of a special Examinations Board in every University and Province, as suggested by the Calcutta University Commission, is highly necessary. The constitution and function of such a Board is fully discussed in pages 2—5, Vol. 5 of its report. It should not be supposed that the Board should consist of expert statisticians only; far from it, on the other hand, it should consist mainly of experienced teachers and examiners though there should be on it a skilled statistician also. Further the Board will require the co-operation of all the Boards of Studies and Boards of Examiners. It "should have inspectorial and advisory but not executive powers. * * * and should act in a sense as the conscience" of the authorities in respect of examinations.

P. V. SESHU AIYAR.

S. R. RANGANATHAN.

ANDHRA UNIVERSITY CONFERENCE.*

THE establishment of New Universities in this province is one of the most urgent problems of the day, and our claim for the constitution of a University for the Andhra Districts is not based merely on local sentiment but must be regarded as part of a new policy of national reconstruction in the sphere of education. The report of the Committee appointed by the Government has gone fully into the question as to the necessity of a new University for Andhra Desa, and I need not refer again to all the phases of the agitation for this for over a decade. The Andhra Desa is a distinct cultural unit in this province and if the view of the Committee with regard to the medium of instruction is to be an essential feature of this and other Universities in this province the linguistic unit should be adhered to. This does not however mean that there should be only one University for any linguistic area. So far as the Andhra Desa is concerned the establishment of two Universities, one for the Coast Districts and another for the Ceded Districts, would be a natural division of the whole area, and this would satisfy the requirements of the whole of the Andhra Desa for sometime to come.

The constitution of two Universities in Andhra Desa is an ideal to be kept in view and to be worked up to as funds permit. Our Tamil brethren are anxious to have a University of their own for the Southern Districts of this Presidency and they have our full support and sympathy in their demand and we shall be prepared to give all the support we can to bring about the establishment of another Uni-

* Opening speech by Dewan Bahadur M. Ramachandra Rao, B.A., B.L., M.L.C., at Visagapatam.

versity in the Tamil districts. For the present we have the considered opinion of the highest educational authority of the province, namely, the Senate of the Madras University, that the proposal for the constitution of an Andhra University should have preference over all others. We sincerely trust therefore that our brethren of the Tamil country will give us their active support in the Legislative Council to the proposal for the formation of an Andhra University.

UNITARY OR LOCAL?

The Committee have expressed the opinion that the ideal to be aimed at is a Unitary Teaching University but for practical reasons they suggest a modification of this ideal and recommended the recognition of all existing institutions in the Andhra Districts as affiliated institutions. They propose however that all honours and post-graduate teaching should be entirely undertaken by the University and that the affiliated colleges should confine themselves to the Arts and Science courses of the Pass degree. I am not in favour of a University of the Unitary type, in the present circumstances nor do I see the advantages of establishing a Unitary Teaching University for so large an area. It seems to me that the better course would be to establish a local University for the whole of the linguistic area or such part of it as you may decide without any marked difference between constituent and affiliated colleges as under the University Bill now under consideration and to permit each college to gradually specialize in a certain number of subjects. I am not also in favour of the proposal to entirely restrict the four first-grade colleges to the pass degree of Arts and Science courses. The further development of these colleges for

honours and post-graduate work would depend on local support and private munificence, and if such help is forthcoming there is no reason why their sphere of activity should be restricted. I think on the whole that it will be wise not to emphasise the unitary idea in teaching too much but to regard the proposed University as a local University intended to satisfy the needs of the Andhra Districts and to permit all existing agencies to fully develop their institutions to the highest state of efficiency subject to the general control of the University.

Every one of us will fully endorse the view of the Committee that any new University organised in the Madras Presidency should be of the most modern approved type and that it should be staffed by competent men so that it may serve as a model for the other Universities, which in the near future are bound to spring up in this province. I do not wish to raise the question of Science *vs.* Humanities which the Marquis of Crewe, presiding at one of the Sessions of the Second Congress of the Universities of the Empire last year, characterised as being as famous and as fictitious as that of Bardell *vs.* Pickwick. I fully share the enthusiasm of the Committee for technological studies and I hope that it will be the distinguishing feature of the New University. The Modern Universities in the North of England have acquired and are acquiring distinctive specialisation in their courses of instruction. Sheffield had been inspired by some of its local industries to concentrate on the metallurgy of steel and iron and of the technology of glass; Leeds is supreme in some branches of chemical research and training such as leather technology, and Manchester offers special facilities for some branches of engineering

and the technology of colour chemistry. Liverpool attracts students whose minds on certain special branches of Marine and Dockyard-Engineering for which facilities are available there, on account of its being one of the largest ports of the world. As a member of the Lytton Committee, I have had to devote considerable attention to this subject and my considered opinion is that our students in foreign countries are meeting with the utmost difficulty in obtaining technological instruction at the Universities and in the works. The need for the establishment of the departments of technology at the new Universities for the development of industries is so obvious that I need not dilate further about it. I may perhaps summarise the position in Great Britain in a few words.

Our Committee examined a number of textile manufacturers, representatives of chemical and allied industries, representatives of the Federation of British Industries, and of technological institutions at various centres. The general attitude of the industrialists as well as of the workmen seem to be that any training given to Indian students would lead to the establishment of competitive industries in India, and that in the case of a country where there is no question of a competitive industry, the firms may be helpful, because they felt that they were building sales organisations in that country. This view was more pronounced in regard to the various processes relating to the Cotton Industry, in regard to which it was stated that the firms in Lancashire would not be anxious to train possible competitors to their trade. In regard to Chemical Industries, a similar statement was made to us by the Chairman of the Chemistry Committee of the College of Technology at Sheffield, who referred to a

recent discussion of the Association of Chemical Manufacturers representing all the important chemical firms in the country, at which it was unanimously resolved that it was not desirable for them in their own interests to admit Indian students. The situation is slightly better in regard to the subsidiary Chemical industries, such as Paper-making, Calico-printing, etc. He definitely expressed the opinion "that from the Indian student's own point of view it was a mistake for him to come to this country in the hope of getting experience in chemical industries as at present it would lead to nothing but disappointment." The recommendations of the Morison Committee that manufacturers should be encouraged to take Indian students on grounds of patriotism has not had any material effect so far as the chemical industry was concerned. There are some Indian students studying Leather Technology in some of the Universities, and even here it was stated that the average tanner is not disposed to admit students to his works nor to disclose any particular method of manufacture, to men who may be competitors associated with some business at some future date. In regard to Glass Technology, a considerable number of glass manufacturers had a big Eastern market for their goods and they seem to hold the view that in training Indian students they were working against their own interests. The Head of the Department of Glass Technology at the University of Sheffield was of opinion that for practical experience under the best and most modern conditions a student would gain most by entering works in America. I believe that the difficulties of getting workshop experience are not so acute in the group of metallurgical industries. I have referred to these matters

at some length, as the whole question of obtaining practical experience in technological subjects for Indian students had been investigated by a previous Committee presided over by Sir Theodore Morison in 1913. I have no doubt whatever that the position has not improved since that date and that a large number of technical scholars who go to the United Kingdom continue to meet with even greater difficulties. I hope that the pressing claims of technological studies will, apart from all other considerations, be recognised without any hesitation and that the New University will afford the facilities that are now so lacking.

Presiding over the Session of the University Congress last year which dealt with the subject of "Universities and Technological Education," the Marquis of Crewe expressed the view "that the future will rest with Universities possessing a distinct bias, whether literary or scientific, not exclusively devoted to either line of study but frankly striving after special efficiency in the one field or the other." In laying the foundation of another University for the Midland counties, Viscount Haldane expressed the same view a few months ago, and stated that every University cannot afford to impart instruction in every subject. Any scheme for the establishment of new Universities in the Province I venture to think will have to be thought out on some co-ordinated plan and so each of the new Universities may be able to acquire a special characteristic bias as suggested above.

THE SITE OF THE UNIVERSITY.

The site of the University now remains to be noticed. The claims of the various places to serve as a site to the University have been

referred to by the Committee and I am certain that this matter will be fully discussed at this Conference. I sincerely trust that we may be able to come to some satisfactory conclusion before we disperse. I only wish to point out however that there is a feeling in the Deccan districts that any University located in the coast districts is too far out of the way for them. While we have every sympathy with them in this respect they have to recognise that the only existing institution of University grade at the present time in the Deccan districts is the first-grade college at Anantapur. There are at present four first-grade colleges and second-grade colleges and a very large number of High Schools feeding these colleges in the coast districts and if the University is to meet the needs of a majority of the students in the Andhra Desa it must in existing circumstances be located in one of the large educational centres in the Circars. Among the places recommended by the Committee the nearest to the Deccan districts is Masulipatam but even if the University is located there, I am not sure whether it will fully meet with the wishes of the representatives of the Deccan districts and so far as I can gather no place outside the Deccan area will meet with their full approbation. The only way to meet the wishes of our friends in the Deccan districts is to establish at the right time a University of the Unitary type at Anantapur but for the present they must recognise the existing facts.

The selection of the site of the University must depend upon the amount of local support by way of endowment that may be available, upon historic associations and cultural traditions of the place and its future potentialities and also upon the type of the University that we desire to set up and finally on its

general accessibility to the whole of the area placed within its jurisdiction. New Zealand adopted a novel method of reconciling the conflicting claims of the different centres in the country which may have seemed applicable here. While selecting one of the large towns as the headquarters of the University, the country was divided into University districts, District Councils for holding the Convocations of the University and transacting other business relating thereto were constituted and the claim of the constituent colleges in different parts of the country to University rank were thus recognised. I sincerely hope that we may be able to reach a decision generally acceptable to all the districts in this matter.

TALISMANS AND CHARMS

For those People to Avoid all Sorts of Misfortunes and Enter the Gates of Successful Life.

	RS. A.
For Honour, Riches, Learning and Greatness ...	7-8
For Health, Physical Strength, &c. ...	7-0
For Power of Eloquence, Speeches, &c. ...	7-8
For Success in any Undertaking or Litigation, &c. ...	10-8
For Success in Sport, Racing, Cards, Games of Chance, &c. ...	7-8
For Success in Trade, and Business ...	10-0
For Men's Love to Women ...	7-8
For Women's Love to Men ...	10-0
For Love of Opposite Sex, attractive power ...	7-8
For Agricultural Prosperity, Farming, Good Crops, etc. ...	7-8
For Success in Mining Plumbago, &c. ...	100-0
Rabbi Solomon's Special Talisman for every success. Specially valued and worn by every successful	15-0
Hebrew, 2nd quality ...	A. 21-0
1st quality ...	80-0

NOTE.—A Money Order will bring the Talisman to your door. Always the full amount should be paid in advance. No V. P. P.

Extensive Life Readings ... RS. 15.

D. A. RAM DUTH,

ASTROLOGER,

No. 30, (E.R.) Cheku Street,
COLOMBO (CEYLON.)

SUPERVISION: WHAT IT IS AND WHAT IT OUGHT TO BE.

(Continued from October No.)

By Mr. A. T. PALMER, M.L.C.,

Headmaster, McLaurin High School,
Cocanada.

I FEEL extremely thankful to an Assistant-Master who dealt on this important subject. Many of the caps he knit fit me well and I wear them with profit.

But it seems to me that he has not done full justice to the subject and if I attempt to supplement what he has said, it is not with the spirit of 'eye for an eye' but entirely with a desire to contribute my quota to such an important matter—a matter directly connected with the smooth running of our schools.

I start by saying that supervision is a necessary evil. It is necessary even in schools which have the fortune of possessing conscientious teachers so as to secure co-ordination in the work turned out in the various sections of the same class and in the different subjects taught. Supervision is also necessary to keep up the tone of the institution and discipline amongst the students. Even the best material is likely to gather rust unless given a brushing now and again. Supervision at best is an evil. It is an evil because it entails criticism. If supervision consisted of all praise it cannot be supervision. And criticism is a distasteful thing whether it is constructive or destructive, it makes no difference. Even the worst of us is as chagrined when criticised as he is happy when praised. If for example, you go to a copy-master and say "I am glad all the boys possess copy-books, the books are uniform, corrections are made scrupulously—but I think it will be

better if you move about and correct the mistakes as they occur," he will forget all the praise showered on him and begin to ruminate on the remark. I do not blame him, it is quite natural that he should feel so—but supervision has to go on in spite of it.

Unbiased people who have observed teaching both in the West and here remark that teaching is done there more conscientiously. I have not gone to the West and so am not in a position to corroborate it. But one very often than not feels that teachers here can exert a little more—just a little more. Of course they have their own case to state—they are poorly paid—they are overworked—they have no proper appliances—the classes are too big—the climate is too severe—which I admit are all contributing causes. But granting all, I must confess perhaps most unwillingly that we here need greater supervision.

Inasmuch as supervision is necessary, it should be the foremost thought of every Headmaster to devise methods by which this unpleasant work may be made less grating and harsh. Perhaps it will be less annoying if the Supervision Book is expunged. But this book is one of the fortifications of the poor Headmaster. I shall explain what I mean. Once I had to tell a certain History Assistant that he was not making the students draw maps on the portions of History he was teaching but I did not make mention of it in this unfortunate book. The inspection time came and the Inspector was shrewd enough to notice this defect. He fell foul on me that I did not draw the attention of the teacher to this. Perhaps remarks may be couched in less offensive language—though I do not agree with my friend that un-idiom and un-English is the offending part of them—for we all live in glass houses in regard to un-English—even

the best of us go wrong. As the maintenance of Supervision Book is necessary for other reasons also—this document may be kept in the strict custody of the Headmaster so that no other teacher except the one concerned is made to see the remarks about his work. This will remove the bitterness a good deal.

Supervision might be made less vexing if Headmasters take pains to get over the weakness, to which I confess I am a victim, of blurring out before the class remarks against the teacher. I admit this happens only when the teacher does not mind the repeated correction of the Headmaster. This also happens I must say when the Headmaster's mind is agitated for one thing or another—absence of a number of teachers at a time—illness prevalent in the town affecting the attendance of boys, unending correspondence from the Inspector or other authorities, stupidity of the writer and a thousand and one other things of which the fortunate martyr of a teacher is innocent. But all the same the Headmaster should cultivate self-control and see that a teacher is not belittled before his own class.

One other failing which we often find in Headmasters is impatience. As soon as a Headmaster enters into a class and finds things are not as he would wish, he is put out. There is a dull boy in whose head nothing seems to enter, the teacher does not explain to him in the manner the Headmaster would have it, the boys are inattentive, the black-board is hardly used; the Headmaster then frowns at the class, he frowns at the teacher and interferes with the teaching, puts the whole class into consternation. I suppose this is what an Assistant-Master calls 'bombardment'; such supervision may be avoided with advantage.

It is suggested by some that the sharpness of supervision might be mitigated by delegating it to the Senior Assistant. I think this only aggravates the trouble. A teacher would rather be criticised by the Headmaster than by those who are in the same status as himself. Besides the criticism of a Senior Assistant is as a rule more distasteful than that of the Headmaster. I had better omit mentioning the reason for it. Supervision by Assistants is also recommended on the score that the Headmaster is not expected to know all the subjects taught in a High School especially in these days of specialisation and therefore specialised men should supervise the teaching of those subjects. This idea arises from a misconceived notion of High School specialisation. It also reflects on the material produced by the Universities. As a rule it does not take long for a Headmaster of average abilities to acquaint himself with those 'specialised subjects.' Besides in ninety-nine cases out of a hundred the supervision has to do with matters extraneous to the contents of the subject taught, e.g., following the syllabus, preparing of lessons, progress that is being made, drilling of the students, use of the black-board, neatness of work of the students and so on. Therefore the Headmaster is the right person to do this unpleasant task.

If the Headmaster is bossing it over his Assistants he is following a tactless course. The success of a school depends upon the harmony prevailing amongst the staff. The Headmaster should do all that lies in his power to make himself loved by his Assistants. This is by no means an easy matter. From the very nature of things the Headmaster is an object of prejudice. He is always that ignorant and uninspiring soul of a Head-

master as an Assistant-Master would have him.

In conclusion it has to be borne in mind that the very foundations of a school are laid on obedience and discipline. Every school is the training ground of a nation. If a nation has to become great its children must be brought up under strict discipline. We yet have to learn as a nation to revere the place and not the man. Obedience to and respect for authority are the very fundamentals of success. In a school students should obey the teachers and the teachers should obey their head. When an Assistant feels like adopting the motto "Save me from this ignorant, uninspiring soul of a Headmaster," I think it is high time for him to quit his place and become a Headmaster somewhere.

THE SCHOOL ARITHMETIC BEING SOLUTIONS OF THE QUESTION PAPERS SET FOR THE LOWER SECONDARY EXAMINATION FOR THE YEARS 1880 TO 1904

CHIEFLY INTENDED FOR THE USE OF PUPILS
OF THE 1ST, 2ND & 3RD FORMS

BY

H. CHENNAKESAVA AIYANGAR.

Price—8 As.

SRINIVASA VARADACHARI & CO., Triplicane, Madras.

THE AIM OF HISTORY.

THERE are certain school subjects which the teachers are determined to teach badly. They have banded together and sworn to impart them to students in such a way as may make the confusion worse confounded. They know the parents have contrived in more than one way to muddle the heads of their unsuspecting children, and the college professors will instil into them all sorts of useful or useless information and thus make a puddle of the muddle; then why should they as the intermediary link take upon themselves to undo the good done by the parents and prepare a decent reception for the professors' information? They know that children are born spoiled and bred up spoiled and will end spoiled; why should they worry themselves with their reformation? But then is this the reason that those, who know the follies of teachers, the havoc brought by the parents and the ruin brought about by the professors, should fold up their hands and look on? Because the League of Teachers has passed a resolution of Non-Cooperation with all that is good in teaching, are the thinkers on education justified to hide themselves in silent corners? This is cowardly; against principle, morals and the laws of intellect. The few who know and keep silent are greater sinners than those many who out of sheer ignorant obstinacy commit mischief. The determination to do mischief must be combated with the determination to do good. The action to be destroyed must be brought face to face with reactions of greater force.

It is with this object of combating the irrational practice with the well-reasoned theory fully backed up with actual practice

that I submit this article to this Journal fully aware that objections imaginary or otherwise will bristle up to wound my ideas all over, or at least have the consolation of making a scratch although not minding of themselves getting blunt. I take up one subject out of many. It is History. I do not know under what inauspicious star this subject was born. Probably the star was named Misunderstanding. The influence of the star still exists. Schools are its repositories and safes. To this day, this 20th November of nineteen hundred and twenty-two, people misunderstand History. They know it, but they know what it is not. To them History is only a record of the past. It is an account of the deeds of peoples gone by; and Kings, Prime-Ministers and Generals make up that people. It is nothing more. It will be a blasphemy to add anything more to the connotation of History. There are more reasonable or less reasonable persons who consider it to be a useful fertile field for gleaning out stories and tales, or remembering some witty remarks, eccentric behaviours, and funny or fateful accidents. But what about the teachers? Why they must also have their say and unfortunately practice too. They consider (if they consider at all) that History is a treasury of facts. These facts are hard. Students cannot digest them unless they swallow them up and then go on chewing the cud. These facts have no other value. They must be retained in the head and reproduced in the examination. Living students are made to memorise dead facts with no other purpose than their production intact. Is it not horrible? But who knows and who cares to know it? We are paid to teach; we are to put in a month's attendance and get the

salary; whether the brains in our charge, fare ill or well is not our look out.

Then what is History; what is the object of its teaching; and what methods should be adopted to teach it? Let me answer them. History is a record of the past. I admit at the outset; but it is not a record of a few actors playing their roll on the stage of the world. Only Kings, Prime-Ministers, and Generals have not filled up this vast earth, or make up a nation, or set up and ruin Empires. They have acted their parts and often very important parts too. They have initiated vast systems and set up gigantic institutions; but they are so many from among the actors on this earth. Alone they never did anything, single-handed they achieved nothing. No match can burn a material unless the latter has the property of combustibility. No king can set up institutions unless there are subjects to welcome them. Then what a pity that in History you find the names of these few matches, but make no mention of all that huge mass of combustible material which set up a country ablaze. The old rusty and musty idea that History is a record of a few gigantic persons' activities must be altogether expunged from the mind. A more correct, useful and instructive view should be taken. It must be an account of the deeds of the persons of the past. The deeds should form the main theme and persons the secondary. Again the persons must include all those who have taken part in the performance of those deeds. It must be plainly, clearly and correctly shown how this initiative was taken, how ways and means were thought of, what material was used, how far the object was achieved and what elements contributed most to the success or failure. This treatment with these details will make

the past live in the present. The subject will lose its unreality and as such will have an interest for all, young or old, boy or girl. For, what is the object of History? Is it to burden the memory? Is it to vomit it at the time of examination? Is it to know the names of persons, battles and events in chronological order? Or is it to be cowed down by the irresistible conclusion of historical events that "where there is rise, there is fall." No, none of these. These objects have been set up by the unthinking teachers, the foolish examiners, and the do-nothing religionists. Mere memorising has been condemned more than once by men of knowledge and light, while the philosophy of passivity contained in the words that "where there is rise, there is fall," preached by religious zealots with such vehemence and force, must be soon given up. The world loses nothing by the operation of this law. An individual, or a nation or a country may lose or gain, but humanity at large suffers nothing. Humanity is marching towards a goal, though an unknown goal, but still a goal. It will reach it; and there rises and falls, ascents and descents, are only the ups and downs on its way. None should fear falls, none should court them. If they come across the path, they must be taken more as "cautions" than anything to lament. More care ought to be taken to descend so that one be able to rise unhurt and uninjured.

The object of History is to understand the present situation of Man and to enable him to advance in the future. The systems, institutions, organisations, ideas, theories, law, etc., of the present day are quite incomprehensible unless we have got a historical back-ground to understand them. The present is rooted in the past. Like the vegetable world, the human

world grows. Man may think that he wills his actions, but this will is itself influenced by the laws of growth. The present is only the past shooting forth and trying to extend more and more forward. Then let me repeat that the object of history teaching is to enable students to understand how present ideas, institutions and systems have grown or their knowledge has increased (as that of astronomy), and how it is possible to maintain the progress and to avoid pitfalls besetting its way. To gain this object the student will have to study the history backward, i.e., he will be first required to have a sufficient knowledge of the present situation, and then will study the past. I am not blind to the complexity of the present and the simplicity of the pupils' minds. Whenever I have placed these ideas for the consideration of my friends I have invariably been confronted with the word "complexity." But is the past less complex? Ask any research scholar in History and you will be perplexed to hear the innumerable difficulties which he has to meet in unravelling the problems of the past. Past is simple because we are ignorant of it; it is not simple because it was less human. Moreover the complexity of the present situation is not irreducible. It can be simplified for the intelligence of young students in the same way as we have done with the past. "The High Roads of History Series," published by Thomas Nelson & Sons, is a good example of this simplification. Histories may be rewritten with the sole purpose of enabling the students to understand the present in the light of the past.

Here I have another objection to meet. My friends say that it is possible to write History as proposed above and to teach it as well, but what about the second portion

of its object, that of enabling the students to progress in future. History may describe the present and the past but how can it direct for the future? Moreover we have got different branches or departments of knowledge which claim a thorough treatment of a subject. Do you mean to see all these sciences disappear or merge into history? I mean nothing like this. No history can prescribe a specific for the future maladies or a stimulant for vigorous growth in the time to come. This method of treating history will only make the historical conceptions clear and thus enable the students to avoid pitfalls which one with dim or blurred ideas cannot. Its directive value, will consist in the interest and clarity of thought and not in being equipped with ready-made instructions for advancement. Such directions none can give.

SAJID ALI.

KARUNATARANGINI

(English translations from the author's original lyrics in Sanskrit)

By K. KRISHNAMACHARYA, B.A., L.T.

WITH A FOREWORD

By PROF. P. SESHADRI, M.A.

Price 4 as.

'The poems are full of melody and fine sentiment.'—*O. H. O. Magazine*.
The translations are readable.—*The Daily Express*.

HISTORY OF THE INDIAN PEOPLE. LIFE IN ANCIENT INDIA

In the Age of the Mantras

By P. T. SRINIVAS IYENGAR, M.A., L.T.

D. Cr. 16mo. 140 pp. Price Re. 1. Charges extra.

By the same Author.

THE GAYATRI

D. Cr. 16mo. 48 pages.

Price 6 as. Charges extra.

SRINIVASA VARADACHARI & Co., MADRAS.
XXVIII—107

THE TEACHING OF ARITHMETIC

By Mr. JOHN M. BHAKTUL, B.A., B.T.,
H. E. H. the Nizam's Educational Service,
Aurangabad.

ARITHMETIC is one of the common school-subjects, but it is probably the only subject in which the proper conception of the difficulties to be overcome in the teaching of it, will lead to marked changes in the present manner of handling it. The problems that rise up on account of the inadaptability of the syllabus or the unwise system of examinations fall, in common with problems similarly caused in the case of other subjects, beyond the right province of the teacher who has no hand in determining these two factors. He has therefore to take the situation as it presents itself without grumbling at them and appreciate the difficulties that fall to his lot in handling the subject in and with the class.

DIFFICULTIES DUE TO THE GENERAL NATURE OF THE SUBJECT.

The first set of problems that he has to overcome arises out of the general nature of the subject itself. There is no other school-subject, probably excepting experimental science, in which the conative tendencies roused by the problem presented by the subject find their end-state and satisfaction in the complete psychic circle. The student reading History tries to interpret to himself the experience embodied in the reading matter in terms of his own experience and wherever he finds that the new experience does not readily come in contact with the apperceptive mass in him, he has to concentrate his attention and reshuffle his experience. The stream of his consciousness

finds its satisfaction in this subjective process and rarely expresses itself in any constructive movement. Though this is the case, it may yet be truly said that the student has mastered the subject. But that is not the case with Mathematics, especially with Arithmetic. The knowledge of Arithmetic does not consist in the mere understanding of the principles. To the extent to which the principle understood cannot be applied by the pupil in the solution of problems, the knowledge of the subject remains incomplete: for the process through which the mind travels to the final attainment of the result determines, if the result be correct, the comprehension of the principles involved in the problem. Otherwise not. In other words Arithmetic cannot be learnt either by reading or listening but by working. That is, while it involves attention—concentration of mind, the conative aspect in which the end-state is reached in the acquisition of the various other school subjects—the mind in Arithmetic and in allied subjects discharges itself in the completion of the full psychic process, affirming or negating the preliminary presentation of the solution which the suggestion of the problem evokes in the mind at the beginning.

This at once leads us to the discrimination between the understanding of the principles and the conventions used in the application of the principles. The boy intuitively knows that two and two make four, but no amount of understanding the principles will acquaint him with the way in which the process of addition is shown on paper or slate as $\frac{2}{1}$. The failure to recognise this fact is seen when a problem is butchered in a number of ways, but somehow the result is arrived at. Such shabby handling

of Arithmetic problems robs the process of all its educational value, which consists in systematic thinking and orderly expression thereof.

Another problem incidental to the general nature of the subject is determined by an exaggerated sense of the disciplinary value of education. At a time when education was defined in terms of discipline, there was no subject which lent itself better to be treated formally for the gymnastics of the mind. Round each principle a vast number of conundrums were proposed to keep the pupil "chewing rubber." More consideration is now-a-days, under the influence of child-lovers like Fröbel, given to the interests and life of the pupils, but the tendency to treat the subject as formal is still there and in the confusion of exercises which of necessity degenerate to be mechanical, it is not seldom that the principles themselves are lost. Further much valuable time which could be spent in the acquisition of a knowledge of the higher and more comprehensive principles is long neglected along with the association of simple processes with, and among themselves within, the more comprehensive ones. For such going round and round the same Arithmetic principle like the bull treading the oil-press, the current examination system is not a little responsible.

There is yet another problem determined by the nature of the subject, with its definite results. This is the subject in which competition can be markedly brought out. After the explanation of the principles each pupil is to vie with the other in his ability to manipulate them, in the solution of problems dictated. There cannot be co-operation between the pupil and the teacher, much less among the pupils themselves. Till the order

"slates down" is given, the teacher generally sits glued to his chair and keeps a vigilant watch over the class, lest the answer should be passed on—How often he is outwitted!—and takes the unnatural attitude of a police officer. Under this watch rogues are manufactured, for, helping counted a sin, stealing obtains. You rarely find an Arithmetic lesson which is not an examination lesson with co-operation banished alike between the pupil and the teacher and the pupils themselves.

DIFFICULTIES INCIDENTAL TO THE NATURE OF THE SECTION OF THE SUBJECT.

The second group of problems that face the Arithmetic teacher are due to the nature of the particular section of the subject. In this connection a few examples will suffice. While teaching Numeration and Notation the explanation of the place-value on which the whole decimal system of numbers depends, though based on the general principle of radix of Geometrical Progressions, will have to be given in terms which the child mind can grasp. Hence resorting to mechanical methods of groups and bags, &c. While teaching proportion all that can be made plain is only a certain aspect of the principle of variation, as for example, if 10 men can do a piece of work in 15 days, whether 15 men will take more time or less to do it. But the conventional method in which this is expressed and the problem is worked out is not easy of explanation. To what extent memory should be used in the acquisition of the Multiplication tables has troubled not a few of child-sympathising pedagogues. Such examples can be multiplied almost indefinitely.

PROBLEMS DUE TO THE INEQUALITIES IN THE BOYS.

Let us take up the next set of difficulties that face the teacher. Whatever the level of efficiency of the class may be in the subject, it is evident that there are always a certain number of boys who naturally are quick in grasping a new principle. The teacher has to take sufficiently long time to make the average boy—nay, he is bound to give his particular attention to the less favoured—and therefore make the dull one understand the principles. How far he is justified in nothing less than wasting the time of the brighter pupils for the benefit of the dull ones is a question that should be discreetly settled. Further than this the differentiation between the bright and the dull ones appears not only with reference to the understanding of principles, but also in working out examples, and should this dullness in understanding co-exist with the slowness in working, as it usually does, the disparity becomes quite desperate. Thus the disparity between the brightest and the dullest boys sets one of the greatest problems to the teacher for immediate and considerate solution in the class-room. Some boys for one reason or the other—in most cases the blame is on the conscience of the teacher—may have developed a dislike for the subject. But the nature of the standard required for examination purposes being what it is, what can the conscientious teacher do to irradicate this apathy for the subject? Some boys are accurate workers, quick or slow, while others have the habit of falling into mistakes, though they may have understood the principles. Is or is not the teacher justified in allowing the latter to fall into error or is he bound to save them from their pitfalls, so that they may realise their powers by reaching the goal of solving the problem successfully?

THE ORDINARY METHOD.

Having in view the above detailed few out of the many problems that face the teacher in the class-room, I propose to advert to the method generally employed in teaching the subject and criticise it. The teacher with or without the help of examples explains the principles involved in the section of the subject to be taught, dictates a problem and gives time to the pupils to work it out. He sometimes tours within the class, generally to acquaint himself as to whether the principle is understood or not, but rarely interferes to direct the work of the pupils. Or, he may not do this at all, but may seat himself tight in the chair till he thinks it is time to give the order "slates down," when he checks the answers to count how many have solved the problem. He may then think it necessary to work the sum on the black-board. He proceeds next to the next problem. Thus sum after sum is dictated and worked out or not worked out by the boys. I think this is a faithful description of the usual method employed in teaching Arithmetic.

CRITICISM OF THE METHOD.

While I give credit to this method, that it throws the pupil entirely on his own resources, it, in my opinion, takes no account of the various problems already noticed as demanding attention in teaching this subject. Firstly it takes no consideration of the fact that the intuitive grasping of the principle is different from the conventional method in which the principle is arithmetically expressed. Hence the mutilations, the disorderly statement and the absence of argument in the solution of the problem. In taking no consideration of the idiosyncracies of the pupils, it places both the backward and the clever boys at a great

disadvantage. The backward one, whatever the cause for his being so may be, cannot keep pace with the bright boy. He is therefore generally unable either to solve the problem correctly or complete the work by the time the order to stop work is given. Even when the teacher feels the need for explaining the problem on the black-board, the backward one has but the opportunity to see the problem properly and correctly worked out, as against the impression left on him by his erroneous efforts. Hence it is too bad psychology to expect the former impression to be the lasting. The new problem set may be a simple repetition of the previous principle or a variation thereof. In either case the possibilities of success are more remote and become more and more so, as more and more complicated problems are set as exercises, the evident reason being that the progress of the backward pupil has in each case as its starting point not his own realised powers, but those of the clever ones in the class. It is, therefore, not seldom that the poor boy gets the impression that he is a great dunce in Arithmetic—a subject generally speaking of universal importance and therefore, should be more or less universally provided for by nature. Mathematical dunces are made by teachers and are not the products of nature's workshop.

The clever boy is no less at a disadvantage. If the class is to be pulled up together, which is hardly possible, there is a great deal of the clever boy's time wasted. He has to wait till his backward class-mate has finished his sum. He cannot adventure with the next problem, sometimes till after the problem he has correctly worked out is explained on the black-board, for the benefit of his class-mate. His mind cannot be inactive and there is loss

in class discipline of a subtle type. He is tied down to the speed of the dull ones. Initiative and individuality are suppressed, when as is sometimes thought he is given rest which he does not need. What is really being done is that he is deprived of the pleasure he would successively get as he solves the problems one after another without a break. The greater the number of problems solved, the greater the pleasure and to rob one of the pleasure in one's work is the best way to make one detest it.

All this is done in the name of examinations. But even with reference to this aspect of the question, the pupil is placed in unreal conditions. Few examinations are such in which the questions are set one after another. There is no dictation of questions in examinations except in the very early stages. Printed papers are given and there is no waiting for one another.

Further, co-operation is contraband. Pupils cannot help one another. They must either do the sum correctly or do it incorrectly, for few can afford to keep lazy even when they do not understand the problem. The teacher does not help: for to do so is to do injustice to the others. How could the clever boy show himself off? Is he not entitled to it by the merit he possesses? Where is otherwise the discipline which brings out merit and drives the other to the wall? As a result the teacher sits glued in his chair, and as a rule the Arithmetic teacher has a lazy look about him.

THE METHOD SUGGESTED.

The method that I would suggest differs slightly in appearance but largely in principle from the one criticised above. Any section in Arithmetic involving a new

principle must begin with simple oral exercises. There is nothing like mental Arithmetic that enlivens even a jaded class. It is the best instrument to quicken Arithmetic perception and the mind in a flash catches at the principle involved in the simple problems suggested. This almost intuitive perception of the principle unencumbered with the conventional methods in which it is expressed should be the first step aimed at, and after sufficient drill is given in illustrative examples, the manner in which the principle is conventionally expressed, should be indicated logically on the black-board with the help of the boys as far as possible. The importance of this lies in the extent to which the psychological method of the mind is reconciled with the logical method or the black-board. For this educates the mind and that lends interest to the process of education. When a sufficient number of problems are worked out thus, to illustrate the principles of the method of application thereof, a new sum, or one of the sums already explained is given to the class for solution and while the class is engaged, the teacher constantly is on the watch to see that each and every pupil is working the problem in the right way. If any have failed to grasp either the principle or the method, it is the business of the teacher to give individual attention to such, while yet the problem is being tackled. In this way when the teacher is satisfied that the class as a whole has grasped what has been taught, he writes a number of problems on the board to be worked out, or makes the boys work from books if they are had in sufficient number. This enables the bright pupils to go ahead and gives sufficient opportunity to the teacher to give individual attention to the

dull ones, if he is touring in the class with his eyes open. The bright boy may have finished the fifth sum while the dull one is still struggling on with the first problem. Each one determines himself and the teacher simply helps each in this process at the boy's own standing. If for convenience sake the dull boys are made to sit on one side of the class, greater possibility for individual attention is created. Further as these lessons are not examination lessons, it will be possible to allow co-operation among the boys themselves, if pairs of boys of equal ability are made to work together and are allowed to consult one another, whenever they feel the necessity. It is not difficult to make the pupils understand the difference between copying and consulting and in this atmosphere of freedom the honest self that develops is well worth the wealth of the world. Occasional pulling up of the class is necessary to satisfy examination requirements and in this the teacher may safely enlist the help of the brighter pupils to further the progress of the backward ones, to the great advantage of both. For teaching is the best form of recapitulation if not of learning and who can be a better teacher of boys than the one—the boy—who understands his difficulties best? This occasional pulling up of the class together should be followed by revision and testing or examination.

CRITICISM.

May I anticipate a few points of criticism and meet them? While admitting that the method suggested keeps the class and the teacher constantly engaged and allows the bright ones to proceed on unencumbered to the determination of their individuality, it may firstly be objected, that it needs a first class teacher to follow this

method, especially with reference to co-operation. This objection tries to make the proposal a counsel of perfection, which it is emphatically not. Can any method be suggested in which the personality of the teacher does not count? Is it not also true that while a good teacher makes a method good, a good method may make a teacher good. Who can eliminate this inter-dependence? Let the indifferent learn to teach, following a good method and he may very soon establish a claim to be classed with the good ones of his profession. Boys copy—Do they? For that, this method has not been responsible in the past. Under this method, if they copy, they have misunderstood the word co-operation. There is no dishonest intention, nothing immoral. You call into play the boys' sense of honesty, if you ask them to decide for themselves, when they should consult their neighbour over a difficulty. This method does not manufacture rogues, trained under the vigilance of the teacher. The honesty that needs a police-watch is not worth the watch. There cannot be a greater call to the play of the best instincts in the boy than the call for the exercise of his sense of honour in an atmosphere of freedom. The necessity for consultation is greatly minimised with the wise grouping of boys of equal ability. The next objection to the method may be, that it puts very little premium on emulation which is a euphemism for rivalry. The individualistic systems of Western education based on this blessed principle has made the world just a little while ago, pass through blood and fire. Emulation, has to its credit, the fact that it has brought out merit in the clearest possible relief, but under the world system it has created merit, which, unlike water, has rarely ever found its level. May

REORGANISATION OF TRAINING SCHOOLS.

IN a previous article* the problem of Elementary Education was shown to depend largely on the quality and nature of the teacher and his qualifications; hence as the first step in the reform of Elementary Education, it was suggested that the qualifications of the candidates for training in the Training Schools should be raised and other necessary changes recommended so that really better teachers may be available for manning the Elementary Schools of this Presidency in future.

In this article, I propose to discuss the various changes that should be carried out in the curriculum and syllabus of the Training Schools so that they may satisfy the needs of the village communities under modern conditions. The product of the Training Schools should be qualified so as to lead them onward to greater and greater prosperity.

The present syllabuses of instruction for the Elementary Training Schools comprise a very large number of subjects, viz., Vernacular, Elementary Mathematics, Geography, Elementary Science, Nature Study, Drawing, Civics, Manual Training, Drill and Games with History, English and other optional subjects, in all of which importance is laid on the subject-matter and not upon the methods of teaching the subjects. Secondly they are intended mainly to improve the general qualifications of the students under training. On the other hand, they have very little to do with the conditions of a village school and its requirements.

It not be remembered that those who are in the enjoyment of the fishes and loaves of life are in the possession of them, not by dint of the extraordinary powers they possess or the extraordinary services they have rendered, but by the use of opportunities made available to them to the exclusion of others, by such means, as they may not be proud of in the majority of cases. This is the "irony of fate" which is the common burden of many a man of merit. Competition in life must be subordinated to co-operation and it is the business and privilege of the schools to teach it. Inasmuch as whatever competition can exist in the school-work in class-room [not in its results] can be only among the boys of the same type, it is only prejudice and habit of thinking, that makes one suppose that there cannot be emulation between the boys grouped together for co-operation on the basis of their being about equal in their powers. It is impossible but that there should be emulation between them; for otherwise the work will be the work done by one acquiesced into by the others. The emulation is subordinated to co-operation, for, the one is in a way made responsible for the progress of the other. Is not co-operation in some slight way made use of in the teaching of the other school subjects. The question unanswered or partly answered by one is answered or supplemented to by another or the teacher himself, to the benefit of the whole class. On what reasonable grounds can this principle be inhabited in the teaching of a precise subject like Arithmetic? Can reasons be advanced why this principle may not be extended except only to the activities on the play-ground?

* *Reform in Elementary Education*, published in the August number of the "Educational Review" for the year

It will be conceded by all that the village schools are mostly manned by a single teacher or two teachers who have to teach a number of pupils grouped into four or five standards. It is not possible for one or two teachers to teach all the four or five standards a number of subjects of the Elementary School syllabus, viz., Vernacular, Space and Number Work, Drawing, Nature Study, English, etc., in an efficient manner. Nor are they quite competent to attempt to do it. It will be quite sufficient if they teach the Three R's (Reading, Writing and Arithmetic) intelligently and attend to the training of the children in practical occupations like clay-modelling, gardening or other rural industries. They may also pay special attention to the physical training of their pupils.

In order that the rural school teachers may perform the abovementioned duties efficiently when they take charge of the schools, it is necessary that the Training Schools should equip them with the necessary training which would directly prepare them for such a practical teaching.

Hence the course of training will have to be more practical, the latest theories and methods of education being embodied in practice by the teachers of the Model School attached to the Training institution in their daily work so that the students under training may directly observe them with a view to put them into practice in their own schools.

It should be clearly understood that the Model School is even now intended to be conducted in these lines but I wish to emphasise the practical and professional side of the training of the students more than the educational training which now takes up a major portion of the time spent by them in the Training School. In order to do this effi-

ciently greater attention should be paid to the actual working of the Model School which should be conducted in the most up-to-date lines.

It should be equipped with a typical vernacular library, a museum, a school garden and a play-ground in such a manner that all of them may be within the reach and means of every village school. They should serve as a model for the future village school-masters who are under training, who will then find it easy to copy them in their own localities. The library and the museum should be largely used for the daily work of the school both by the children and the teachers of the model school and not merely kept as shows for exhibition. Pictures and maps and other apparatus needed for teaching may be mostly made by the teachers themselves according to their needs and these may then go into the school museum to enrich it. Good stereoscopic views and magic lantern pictures should often be used so that the teaching imparted may be impressive and realistic. Even some of the slides for the magic lantern may be made by the teachers themselves with a little special training. The school garden should have not only an educative value but may sometimes serve the purpose of practical demonstration to the village people.

Rural games may be largely encouraged by being actually played in the Model School play-ground under the guidance of the teachers. The physical education of the children should deserve due attention from the teachers of the Model School. Sanitary and hygienic laws should not only be imparted to the pupils of the model school but the teachers should insist upon the pupils observing them wherever possible. To take an example, personal cleanliness conduces to bodily health.

But most of the pupils are generally uncleanly in body and wear dirty clothes in most village schools and very often in the model school as well. The teachers of the model school may very advantageously introduce the system of *aths* for such of the model school pupils as are uncleanly in body and dress. Baths may be given twice a week in the beginning which may be gradually increased—if there is any need—as facilities are forthcoming and experience accumulates.

This will be a most salutary innovation in the working of the model school which will conduce to the health of the model school children and bring about the needed reform in personal hygiene which is likely to be easily copied by the rural schools. Then the proverbial dirty appearance and the stink of the rural school pupils which should have been noticed by keen observers would disappear.

In short the model school should be self-contained in every way and should be capable of being imitated by the rural schools in as many activities of its work as possible and could serve as a real model for the rural schools in all its aspects.

So much for the reform of the model school. Now taking the training section a few useful improvements are suggested:

(1) It may be equipped with a library which can be circulated among the village schools situated in the Taluq or the Range in which the institution is located so that each village school may use it for at least a fortnight. If it is a fairly large library capable of being divided into sections, say, Vernacular, English, Scientific, Children's, Teachers', adults', etc., each section may separately be circulated so that a number of schools may

have the use of the library at the same time. (The Native State of Baroda has been much benefited by the institution of circulating libraries especially among the people of the rural areas.)

(2) The magic lantern and slides which have been supplied to the Training School may occasionally be taken out (say, once a month) by the specialist member of the staff of the Training School, who is in charge of them, for popular lectures so as to spread Mass Education. Of course he may have to be paid travelling and halting allowances and other necessary charges if he is to do the work ungrudgingly and enthusiastically.

(3) Courses of lectures may be specially arranged to be delivered by the specialists in the Training School once a year, say, for a week or fortnight for the benefit of Elementary school teachers and others who wish to attend them so that the teachers of the Elementary school may be kept in touch with the most up-to-date methods and ideas of teaching. Here also it will be necessary to pay travelling and halting allowances for the Elementary school teachers so that all of them may be induced to attend these lectures. It would be immensely useful if the specialists chosen are enthusiasts in their profession who would then be able to spread the enthusiasm among the Elementary school teachers.

If these reforms in the Training Schools are carried out, they would impart an air of liveliness and efficiency not only to the Training School but also to the teaching profession in the sphere of Elementary education and, at the same time, would help to bring about the spread of Mass Education and real enlightenment among the people of the area in which the Training School is situated.

G. RAMAKRISHNA Aiyar.

MADRAS UNIVERSITY SENATE MEETING.

A CONDOLENCE RESOLUTION.

Before the regular proceedings of the day began, Mr. B. G. Grieve, the Ag. Director of Public Instruction, moved:

"That the members of the Senate have heard with great regret of the death of the Reverend W. M. Zumbro and of Mr. B. Hanumanta Rao, I.S.O., and desire to convey an expression of their deep sympathy to the members of their respective families."

In doing so, he referred to the good services rendered by the two gentlemen in the cause of education in the Presidency. Mr. Zumbro had been connected with educational work in Madras for a very long number of years, and as a member of the Senate, no one could fail to admire and sympathise with his earnestness and sincerity of work which were the keystones of his character. With reference to Mr. Hanumanta Rao he said that he had done good work not only as a Professor of Mathematics but he was also very intimately connected with University work, as an active member of the Senate and the Syndicate. He was a man of genial personality.

Mr. C. P. Ramaswamy Iyer, the Advocate-General, seconded the resolution and expressed his views entirely in favour of the Hon'ble mover.

Dr. Chandler further supported the resolution, which, when put to the vote, was carried unanimously, all the members standing.

THE SPECIAL MEETING.

DISCUSSION ON UNIVERSITY BILL DEFERRED.

The Hon'ble Mr. Justice Coutts-Trotter moved under Regulation 43 (iv) Chapter III of the University Regulations, that the adjourned Special Meeting convened to discuss the Draft University Bill do dissolve. In doing so, he said that it was a mere waste of time for them to discuss the Draft Bill which had already been referred to a Select Committee of the Legislative Council. They had already stated their considered opinion about the general principles of the Bill and when it had not been referred back to them for any further consideration, he would think

it would not be consistent with their dignity to take up the matter again.

Mr. G. A. Natesan seconded the motion and remarked that it would not be in the self-respect of the Senate to discuss a Bill which had not been referred to them for a second time. A silent vote on the motion in its favour would indicate the real feeling of the Senate.

The motion was carried unanimously and the Special Meeting dissolved.

THE ORDINARY MEETING.

The Ordinary Meeting of the Senate was held immediately after the dissolution of the adjourned Special Meeting under the presidency of the Hon'ble Mr. K. Srinivasa Iyengar.

INTERPELLATIONS.

Mr. Satyamurti asked:—

Q. Will the Syndicate state the number of passes and failures in English in the last Intermediate Examination?

A. Passes 1080 candidates; failures 1043 candidates.

Q. Will the Syndicate state the number and names of Pandits and Munshis, actually engaged in teaching Indian languages in Affiliated Colleges who have been appointed to the Boards of Studies and as examiners in Indian languages, during the last three years?

A. A statement is furnished.

Q. Will the Syndicate state the increased cost likely to be incurred by holding the B.S.Sc. Degree Examinations twice a year?

A. About Rs. 1,000.

Q. (a) Was the Syndicate consulted by the Government about the University Bill, after the last meeting of the Senate?

(b) Has the Syndicate written to the Government on the matter?

(c) Was the resolution of the last meeting of the Senate on the University Bill communicated to the Government? Was any reply received from the Government?

A. (a) No.

(b) No.

(c) First part of the question 'Yes'; the second part 'No.'

NEW FELLOWS.

The Syndicate recommended, and the Rev. W. Meston moved that the following newly nominated Fellows be assigned to the Faculties as under:—

Faculty of Arts:—The Rev. J. E. Neill, B.A., Mr. H. Y. Necker, M.A., The Rev. E. M. Macphail, M.A., D.D., C.B.E., and Mr. E. B. Ross, M.A.

Faculty of Science:—Mr. B. B. Day, M.Sc., D.Sc., F.I.C. and Mr. R. D. Anstead, M.A.

Faculty of Law:—The Hon'ble Mr. K. Venkata Reddi Naidu, B.A., B.L.

Seconded by Mr. Ramaswami Iyer, the motion was carried.

SIR WM. MEYER'S GIFT.

Mr. B. G. Grieve moved:

"That the Senate of the University of Madras do place on record its thankfulness to the late Sir William Meyer, G. C. I. E., K. C. S. I., for his gift of £3,000 to the University for promoting the study of History and Economics."

Mr. S. Satyamurti seconded the proposition and said that it was the largest individual legacy left to the University by any single individual. The gift increased in its value, the object of the endowment being the promotion of the study of South Indian History. He hoped that the new University which was going to be created would properly utilise the fund.

INDIAN INSTITUTE OF SCIENCE.

On the motion of Major-General G. G. Giffard, seconded by Dr. P. S. Chandrasekharam, Mr. W. Erlam Smith, M.A., was nominated as the University Representative on the Court of Visitors of the Indian Institute of Science, Bangalore, in place of Mr. W. H. James resigned.

MR. MADELEY'S SPECIAL LECTURES.

Dr. S. Swaminathan moved that the action of the Syndicate in having arranged for a course of 10 Special University Lectures, with two or three demonstrations on 'Drainage,' to be delivered by Mr. J. W. Madeley, M.A., M.I.C.E., M.A.M. Soc., C.E., etc., Special Engineer, Corporation of Madras, during the months of November and December 1922 and February 1923, the cost of the lectures being defrayed from the annual recurring grant of Rs. 65,000 from the Government of India, be confirmed. The mover said that some of the lectures

had already been delivered and they were being very widely appreciated. Mr. P. R. Swaminatha Aiyar seconded the motion.

Mr. S. Satyamurti, in opposing the motion observed that it was essential that the sanction of the Senate should be obtained first and then the lectures could be arranged for. In this case, a portion of the lectures had already been delivered and seeking permission at this stage seemed to the speaker like putting the cart before the horse. He did not at all dispute Mr. Madeley's qualifications. The motion was put and carried.

The Syndicate reported that, in anticipation of the sanction of the Senate and with the approval of the Government, it had awarded to Mr. R. Vaidyanathaswami, B. A. (Hons.), a special scholarship of the value of £150 per annum tenable in Europe, for a period of one year in the first instance, but renewable thereafter on receipt of satisfactory reports from the Professor supervising his work.

Accordingly, the Rev. W. Meston moved—

That the action of the Syndicate in having granted the special scholarship to Mr. R. Vaidyanathaswami be confirmed, and that the cost thereof be met from the Building and Equipment Fund.

Mr. P. V. Seshu Aiyar seconded the motion which was put to the meeting and carried.

EXAMINATION FEES.

The Rev. W. Meston moved:

"That the fees payable by candidates for University Examinations be raised so as to ensure an increase in revenue sufficient at least to make up the deficit in the Fee Fund."

He pointed out that the deficit caused by the second examination was very considerable. All the credit balance of the Fund had been wiped out. The Syndicate had cut down the remuneration of examiners. If they could not raise the examination fees they had the only alternative of abolishing the second examinations for the B.A. Degree except in Part I and the L.T. Degree, as shown in the following memorandum:—

At the meeting of the Senate held on Friday, the 21st October 1921, the Syndicate placed before the Senate a report of the Committee appointed by the Senate to consider the feasibility of holding the Intermediate and the B. A. Degree Examinations

twice in the year. The Committee in their report recommended that the Intermediate, B. A. Degree and B. A. (Honours) Preliminary Examinations be held twice in the year, and further expressed the opinion "that if the University finds that the foregoing examinations cannot be held twice in the year without financial loss, the loss must be avoided by the raising of examination fees or by the reduction of rates of Examiners' remuneration or by both measures." The Senate accepted the resolutions on the above terms, but added to the examinations to be held twice a year the L.T. Degree Examination.

The second examinations in Arts have been held in the years 1920, 1921 and 1922. In 1920 the Intermediate, B. A. Degree and B. A. (Honours) Preliminary Examinations were conducted for a second time, in October, under a resolution of the Senate and the sanction of the Government. In 1921 similarly Intermediate, B.A. Degree, B.A. (Honours) Preliminary and L. T. Degree Examinations were held in December 1921. Under the revised regulations the same examinations were held in September 1922. The Syndicate has been considering the financial result to the University of holding such examinations, with particular reference to a financial statement presented by the Registrar showing the receipts and charges for the B.A. and the L. T. Degree Examinations held in December 1921. set forth below. From this statement it will be observed that for B. A. Degree Examination 1921, at which candidates sat taking the two Parts together, there was a profit of Rs. 1,105 and that for the L. T. Degree Examination at which 66 candidates sat there was a loss of Rs. 450.

It is to be remembered that the candidates admitted to the second examinations each year proportionately reduce the number of candidates who would otherwise sit at the ordinary examinations in the following year and that consequently the receipts for the latter examinations are appreciably smaller though the charges are only slightly affected. The additional cost of the extra candidates consists solely of the valuation fees paid to Examiners and the stationery consumed by the candidates at the examinations. The general printing and stationery charges, the fees for setting question papers, the fee to Superintendents at the examinations and

other incidental expenses remain almost unaffected by a small increase or reduction in the number of candidates attending the examinations. The Syndicate has accordingly given serious thought to the question whether in view of the financial condition of the Fee Fund, the estimated deficit in which for the financial year 1921-22 is Rs. 74,497 and for 1922-23 is expected to be Rs. 35,350, the holding of examinations twice a year in subjects in which only a few candidates appear and which results actually in very heavy loss to the University can be justified. It will be noted that in the B. A. Degree Examination held in December 1921 the following actual losses were incurred in the Examinations in the optional groups:—

	Candidates	Rs.
Group ii A	82	1,089
Group ii B	11	1,136
Group iii	2	858
Group vi	19	1,264

a total actual loss of Rs. 4,347. Similarly in the L. T. Degree Examination the actual loss with 66 candidates was Rs. 450. It will also be noted that the profits made on the B. A. Degree examination in the remaining groups were as follows:—

	Candidates	Rs.
Group i	183	597
Group iv	81	161
Group v	635	1,412

and that the number of candidates sitting for these groups in September 1922 was reduced in the case of Group i by 41 candidates, Group iv by 33 candidates, and Group v by 234 candidates with a probable result that an actual loss had been incurred in all these groups with the possible exception of Group v. It is to be remembered that if the examination in these groups had not taken place, a considerable swelling of the profits in the main examination (instead of a reduction of the same) in each year would have resulted. The Syndicate feels obliged to place the situation before the Senate for very careful consideration.

ALTERNATIVE PROPOSALS.

The alternatives appear to be—

(1) to abolish the second examinations for the B. A. Degree except in Part I and to abolish the second examination for the L. T. Degree; 'or'

(2) to decide upon an all-round increase of fees for the examinations of the whole year.

The Syndicate has made drastic reductions in the scale of fees to Examiners for the ensuing year, and these fees are now at an irreducible minimum as compared with those paid in other Universities and in view of the character of the work expected from Examiners in the University of Madras. The anticipated saving in the year from the reduction is approximately Rs. 20,000, but exact calculations are not possible with the numbers of candidates so uncertain as at present when the effect of second examinations each year upon the main examinations has not yet been properly ascertained. In this connection, the Syndicate desires to emphasise that the Fee Fund is the only fund available to the University for general administration and, in spite of all possible adjustments, is showing a considerable deficit. Unless the resources are immediately supplemented, there is serious risk of the University being faced with a financial crisis. A reasonable increase in the fee paid for examinations appears to be the only way of avoiding this crisis.

Mr. S. Satyamurthi opposing the motion remarked that the Syndicate had not made out a case for the raising of fees. The system of having examinations twice a year was introduced only recently and they must wait and see what the operation of the system would be. In the case of L. T. examination they were charging only Rs. 15 and he did not see any reason why this should not be increased to Rs. 25. He said that they were either a dead or dying body and he doubted if they would have a chance of holding another meeting. They did not know what the future financial position might be and did not like to leave behind a legacy of bitterness by increasing the examination fees. They had formerly made much profit out of the Fee Fund account. They could therefore credit the deficit towards the enormous profits they had been making during the previous two years. Further, the figures exhibited so far showed large profits.

Mr. G. A. Natesan moved under Clause 3 of Regulation 43 that the House do pass on to the next point on the agenda. He observed that the had

been told that plenty of funds would be placed at the hands of the new University, and they need not take up the responsibility of increasing the fees. The new body would do well to take up the question.

K. Ramanujachari said that this was not the opportune time for bringing forward this resolution. They ought not to penalise students who had already been overburdened.

Mr. C. R. Reddy in opposing this motion observed that it seemed to him that they were not facing their responsibilities as they ought to. He was afraid that, if they proceed on this basis, they would be acting more on temper rather than on a serious sense of what they owed to their University. He would therefore appeal to his friends to revise their view on the question and to do what was obviously their duty. Even if the new Bill was passed at the December meeting of the Legislative Council of which he was not quite sure, it would take a long time for the new authorities to be constituted and during all that period when the new machinery was to be prepared, the present regulations would continue to be in force. Did not the House owe a duty to its own executive who, in view of the financial situation, had tabled this recommendation? He believed that they owed a duty to their predecessors as also to those that would come afterwards. They should do everything possible to hand over the trust, which they had been carrying on so far with success in as good a condition as possible to those who would follow them in future.

Mr. Natesan's motion to pass on to the next item on the agenda was put and lost.

Rao Bahadur K. B. Ramanatha Iyer speaking on the original resolution, said that they must see whether they were running the University administration as economically as possible. Retrenchment was in the air everywhere and they must see whether they should not retrench in matters relating to the University. The present moment was not the right one for passing a resolution of the kind proposed. His own opinion was that a Committee be appointed to go into the question of retrenchment in the University expenditure, and this question of revision of fees might be taken up after the presentation of the Committee's report.

The Vice-Chancellor:—Under what regulation do you move for the appointment of a Committee?

Mr. Ramanatha Iyer:—Under Claus. 8 of Section 43 of Chapter III.

The Vice-Chancellor:—Then, you are out of order. The question before us is with regard to fees and not to retrenchment committee.

Mr. Meston's motion was put to vote and carried.

DOCTORATES OF PHILOSOPHY AND SCIENCE.

At its ordinary meeting held on the 11th August 1922, the Senate adopted a motion referring back to the Syndicate for further consideration the resolutions moved by Rao Bahadur K. V. Rangaswami Iyengar for the adoption of the regulations relating to the Degree of Doctor of Philosophy and the Degree of Doctor of Science. The Syndicate, after further consideration, recommended the adoption of the regulations without any change.

Mr. K. V. Rangaswami Aiyangar moved and Mr. K. Ramanujachari seconded that the following Regulations for the Degree of Doctor of Philosophy be adopted.

DEGREE OF DOCTOR OF PHILOSOPHY.

1. A Bachelor of Arts in Honours or Master of Arts of the University of Madras may offer himself as a candidate for the Degree of Doctor of Philosophy (Ph.D.) provided three years have elapsed from the time when he passed the examination for the Degree of Bachelor of Arts (Honours) or Master of Arts, as the case may be.

2. The candidate shall state in his application the special subject within the purview of the Regulations for the Degree of Bachelor of Arts (Honours) or Master of Arts, upon a knowledge of which he rests his qualification for the Doctorate, and shall, with his application, transmit three copies, printed or typewritten, of a thesis that he has composed upon some special portion of the subject so stated, embodying the result of research, or showing evidence of his own work, whether based on the discovery of new facts observed by himself, or of new relations of facts observed by others, whether constituting an exhaustive study and criticism of the published work of others, or otherwise forming a valuable contribution to the literature of the subject dealt with, or tending generally to the advancement

of knowledge. The candidate shall indicate generally in the preface to his thesis and specially in notes, the sources from which his information is taken, the extent to which he has availed himself of the work of others, and the portions of the thesis which he claims as original; he shall further state whether his research has been conducted independently, under advice, or in co-operation with others, and in what respects his investigations appear to him to tend to the advancement of knowledge.

3. The candidate may also forward with his application three printed copies of any original contribution or contributions to the advancement of the special subject professed by him, or of any cognate subject, which may have been published by him independently or conjointly, and upon which he relies in support of his candidature.

4. No application shall be entertained unless two members of the Faculty of Arts, or two Doctors of Philosophy shall have testified, to the satisfaction of the Syndicate, that in habits and character the candidate is a fit and proper person for the Degree of Doctor.

5. The thesis mentioned in Regulation 2, and the original contributions, if any, mentioned in Regulation 3, shall be referred by the Syndicate to a Board of three Examiners.

6. If the thesis is approved by the Board, the candidate shall not be required to submit to any further written examination; but he may be required by the Board, at their discretion, to appear before them to be tested orally with reference to the thesis and the special subject selected by him. The Board shall report to the Syndicate the result of the examination of the thesis, and of the oral examination, if any; and if the Syndicate, upon the report, considers the candidate worthy of the Degree of Doctor of Philosophy, it shall cause his name to be published, with the subject of his thesis, and the titles of his published contributions (if any) to the advancement of knowledge.

7. Every candidate shall be at liberty to publish his thesis and the thesis of every successful candidate shall be published by the University with the inscription 'Thesis approved for the Degree of Doctor of Philosophy in the University of Madras.'

At the suggestion of the Vice-Chancellor, the consideration of each paragraph was taken up separately.

Dr. John Matthai moved the following amendment to para. 1 of the regulations relating to Doctor of Philosophy, of which he had given notice:—

"(a) That in para. 1, line 1, the words 'a Bachelor of Science in Honours' be inserted after 'A Bachelor of Arts in Honours' with a comma between."

"(b) That the following clause be inserted as a separate paragraph at the end of para. 1:—

'A Master of Science of the University of Madras may offer himself as a candidate for the Degree of Doctor of Philosophy (Ph. D.) provided two years have elapsed from the time when he qualified himself for the Degree of Master of Science' and with the permission of the Senate the addition of the words, 'Bachelor of Science (Honours)' after the words 'Bachelor of Arts (Honours)' in the last line but one.

Mr. P. V. Seshu Iyer seconded the amendment.

After a discussion on the amendment, in which the Rev. A. G. Hogg, Mr. C. Ramalinga Reddi, Mr. S. Satyamurti, Mr. F. S. Davies, Mr. F. E. Corley, the Rev. L. Proserpio, Rao Bahadur K. B. Ramanathan, Mr. P. Subramanyam, Mr. P. V. Seshu Aiyar, Dr. B. B. Dey and Rao Bahadur K. V. Rangaswami Aiyangar took part,

Dr. Matthai's amendments were put to the meeting and lost, 22 members voting for and 23 against.

The Rev. A. G. Hogg then moved the following amendments to paragraph 1 of which he had given notice:—

"That in line 3, in the clause 'provided three years have elapsed,' the word 'three' be left out, and the word 'five' be inserted in its place."

Mr. C. Ramalinga Reddi seconded the amendment.

After Mr. S. Satyamurti, and Rao Sahib Dr. S. Krishnaswami Aiyangar had spoken, Mr. Hogg's amendment was put to the meeting and lost.

The original motion was thereupon put to the meeting and carried.

Paragraphs 2 and 3 were put to the meeting and adopted.

Dr. John Matthai moved the following amendment of which he had given notice:—

'That para. 4 be deleted.'

Mr. S. Satyamurti seconded the amendment which was put to the meeting and carried.

As a consequential amendment, the renumbering of the succeeding paragraphs was agreed to.

Paragraphs 5 and 6 were put to the meeting and adopted.

Dr. John Matthai thereupon moved the following amendment of which he had given notice:—

"That paragraph 7 be deleted."

The amendment was not seconded and therefore dropped.

Paragraph 7 was therefore put to the meeting and adopted.

Rao Bahadur K. V. Rangaswami Aiyangar next moved and Mr. K. Ramanujachari seconded that the following regulations relating to the Doctor of Science be adopted:—

DEGREE OF DOCTOR OF SCIENCE.

1. A Master of Arts in Science subjects or a Master of Science of the University of Madras, may offer himself as a candidate for the Degree of Doctor of Science (D. Sc.) provided three years have elapsed from the time when he took the Degree of Master.

2. The candidate shall state in his application the special subject within the purview of the Regulations for the Degree of Master of Science, upon a knowledge of which he rests his qualification for the Doctorate, and shall, with the application, transmit three copies, printed or typewritten, of a thesis that he has composed treating scientifically some special portion of the subject so stated, embodying the result of research, or showing evidence of his own work, whether based on the discovery of new facts observed by himself or of new relations of facts observed by others, or tending generally to the advancement of Science. The candidate shall indicate generally in a preface to his thesis and specially in notes, the sources from which his information is taken, the extent to which he has availed himself of the work of others, and the portions of the thesis which he claims as original; he shall further state whether his research has been conducted independently,

under advice, or in co-operation with others, and, in what respect, his investigations appear to him to tend to the advancement of Science.

3. The candidate may also forward, with his application, three printed copies of any original contribution or contributions to the advancement of the Science professed by him, or any cognate branch of Science, which may have been published by him independently or conjointly, and upon which he relies in support of the candidature.

4. No application shall be entertained unless two members of the Faculty of Science, or two Doctors of Science shall have testified, to the satisfaction of the Syndicate, that in habits and character the candidate is a fit and proper person for the Degree of Doctor.

5. The theses mentioned in Regulation 2 and the original contributions, if any, mentioned in Regulation 3, shall be referred by the Syndicate to a Board of three Examiners.

6. If the thesis is approved by the Board, the candidate shall not be required to submit to any further written examinations; but he may be required by the Board at their discretion, to appear before them to be tested orally or practically, or by both these methods, with reference to the thesis and the special subject selected by him. The Board shall report to the Syndicate the result of the examination of the thesis, and of the oral and practical examinations, if any; and if the Syndicate, upon the report, consider the candidate worthy of the Degree of Doctor of Science, it shall cause his name to be published, with the subject of his thesis and the titles of his published contributions (if any) to the advancement of Science.

7. Every candidate shall be at liberty to publish his thesis, and the thesis of every successful candidate shall be published by the University with the inscription 'Thesis approved for the Degree of Doctor of Science in the University of Madras'.

The regulations were taken up for consideration separately.

The following amendment to regulation 1, of which notice had been given by the Rev. A. G. Hogg was, by leave, withdrawn:—

That in line 3, in the clause 'provided three years

have elapsed' the word 'three' be left out, and the word 'five' be inserted in its place.

Mr. P. V. Seshu Aiyar then moved the following amendment of which he had given notice:

"That para. 1 be amended so as to read as follows:

"Any Bachelor of Arts (Honours) or Master of Arts in Science subjects or any Bachelor of Science (Honours) or Master of Science of the University of Madras may offer himself as a candidate for the Degree of Doctor of Science, provided three years have elapsed from the time when he passed the examination for the Degree of Bachelor of Arts (Honours), Bachelor of Science (Honours) or Master of Arts, as the case may be, or provided two years have elapsed from the time when he qualified for the M. Sc. Degree."

The amendment was not seconded and therefore dropped.

Thereupon the original motion was put to the meeting and carried.

Regulations 2 to 7 were then considered.

In view of the previous deletion of Regulation 4 from the Regulations for the Degree of Doctor of Philosophy, the deletion of Regulation 4 under Degree of Doctor of Science and the renumbering of the succeeding regulations were agreed to; and Regulations 2 to 7, as altered were put to the meeting and adopted.

Rao Bahadur K. V. Rangaswami Aiyangar next moved and Mr. K. Ramanujachariar seconded

i. (a) That the Regulations relating to the Degree of Doctor of Philosophy be inserted in Chapter XXIII of the Regulations and numbered as Regulations 21 *et seq*;

(b) That the Regulations relating to the Degree of Doctor of Science be inserted in Chapter XXIV of the Regulations and numbered as Regulations 24 *et seq*;

ii. That the following consequential alterations be made in the Regulations:—

(a) That Chapter V of the Regulations be altered as follows:—

For the word 'Doctor of Laws' substitute the words 'Degree of Doctor in any Faculty.'

(b) That the following additions be made in Chapter XIX of the Regulations:—

(1) After the words	Rs.
'M.A. Degree Examination	50"
insert the words	
'Degree of Doctor of Philosophy	100.
(2) After the words	
'M.Sc. Degree Examination	100'
insert the words	
'Degree of Doctor of Science	100'
	Carried.

HISTORY AND ECONOMICS

The Syndicate reported that it had placed before the Senate on 21st October 1921 the report of the Board of Studies in History and Economics on the question of the institution of a Degree in Economics and Commerce, etc., referred to the Board for consideration and report by a resolution of the Senate passed at its adjourned meeting held on 5th March 1921. In the report, the Board of Studies recommended, among other things, the remodelling of the Arts courses in History and Economics so as to provide courses in which Economics predominates as an alternative to others in which History predominates, while retaining in both sets of courses the union of the two subjects now in force. Detailed proposals for remodelling the courses were subsequently submitted by the Board and had been accepted by the Syndicate.

Mr. C. R. Reddy moved that Chapter XXIII of the Regulations be altered to give effect to the detailed proposals of the Board of Studies. The detailed alterations together with the proposed change in the time-table for Examinations were accepted.

The Syndicate reported that, on the recommendation of the respective Boards of Studies and in anticipation of the sanction of the Senate, it had arranged for the delivery of the following courses of Ordinary University lectures during the academic year 1922-23, and requested confirmation of its action:—

XXVIII—109

Name of Lecturer	Subject.	Years of the Honours course.	Duration of the course.	Time of delivery.
Mr. P. P. S. Sastri, B. A. (Oxon), M. A. (Madras), M.B. A.S.	Scientific and Critical method as applied to the study of Sanskrit.	III and IV years.	20 lectures.	Oct.—Dec. 1922.
Mr. S. Subba Rao, M.A.	System of Uwaits Vedanta comparatively viewed.	III year.	10 lectures.	Oct.—Dec. 1922.
The Rev. A. S. Woodburne, M.A., PH.D.	Psychological tests of Mental Abilities	L. T. students and Teachers, &c.	10 lectures.	Dec. 1922—January 1923.

Accordingly, Mr. P. V. Seshu Aiyar moved and Mr. S. Satyamurti seconded "That the Syndicate's action be confirmed."

Carried.

UNIVERSITY LECTURES.

The Senate sanctioned the delivery of the following courses of Ordinary University lectures during the academic years 1923-24.

10 lectures on "Palaeobotany," by Prof. Hem Chandra Das Gupta of the Calcutta Presidency College between October—December 1923.

5 lectures and 10 practicals on "South Indian Algae," by Mr. M. O. Parthasarathy Aiyangar, M.A., L.T., during the same period.

B. S. SC. EXAMINATION.

Mr. S. Satyamurti moved:—That the Syndicate be requested to place proposals before the next meeting of the Senate, for holding the B. S. Sc. Degree Examinations twice a year and for increasing the Examination fees therefor, if necessary. In doing so, he said that they were having exceptioning the B.S. Sc. two examinations, a year. He failed to see why the same concession should not be extended to the B. S. Sc. as well. This would greatly benefit the students and the revenue too might be increased. After all there would be an expenditure of Rs. 1,000.

Rao Bahadur Dr. C. B. Ramaswami seconded the motion which was carried.

STUDY OF INDIAN HISTORY.

Mr. S. Satyamurti moved:

That Regulation 4 of Chapter XXII be altered as follows:—Add the words "(c) Indian History" in line 2 of clause 3 (at page 188 of the Regulations) and re-number the present sub-clauses, (c), (d) and (e) as (d), (e) and (f) and that the Syndicate be requested to draft the syllabus in Indian History for the Intermediate Examination in consultation with the Board of Studies in History and Economics, and place it for approval before the next meeting of the Senate.

He wanted that Indian History should find a place in Group iii of the Intermediate Examination which went by the name of "History and Logic." He did not want the study of Indian History should be made compulsory. The students should be given the option of studying Indian History. The matter was not new to the Senate. It had come up before the Intermediate Re-organisation Committee. They contemplated the inclusion of Indian History and the Sub-Committee also viewed the proposal with favour. He was not asking the Senate to commit itself to any definite syllabus.

The motion was seconded by Dr. S. Swaminathan.

Mr. F. E. Corley said he felt bound to oppose the resolution. The General Committee had to face the question whether Indian History should be included as part of the general course in the Intermediate for all candidates alike and it decided in the negative. The Special Committee considered whether or not Indian History could be included as a special subject. After a very careful consideration, he might say sympathetic consideration, they decided that it was not a suitable subject to be taken up as a special subject. To say that all were agreed that Indian History ought to be included in the Intermediate Course would be quite as true as saying that the conclusions were all negative. Speaking on the merits of the question, he said that he had no wish at all to discourage the study of Indian History in this University. On the contrary, he had done what he could to encourage it, but he still felt that the subject of Indian

History was not well-suited for boys at the Intermediate stage. He wanted to see the standard of teaching the subject in schools very greatly improved. It was too difficult for the Intermediate Students. Every candidate in B. A. Pass and Honours who took up History had to study Indian History as part of his course.

Mr. Satyamurti briefly replied saying that all laymen were agreed that boys and girls in all schools and colleges ought to study at every stage the history of their own country. He would only remind the House that it was at the instance of a layman that Indian History was introduced in the B. A. course.

The resolution was carried by an overwhelming majority.

"HINDI" AS OPTIONAL LANGUAGE.

Mr. S. Satyamurti moved:

That Regulation 6 of Chapter XXI be altered as follows:—Add the word "Hindi" under sub-clause '(c) Indian Vernaculars' in "Clause 2 Second Language."

In doing so, he said that languages like Burmese and Sinhalese had been included. Hindi was spoken by a very large number of Indians residing in India. He would therefore like that Hindi should find a place among the optional languages. It simply meant that candidates for the Matriculation and the Intermediate Examinations might study Hindi, if they liked, as an optional language.

Rao Bahadur K. V. Rangaswami Aiyangar seconded. The resolution was put and carried.

EDUCATION MINISTER'S POLICY.

Mr. S. Satyamurti moved:

That the Senate do place on record its regret that the Hon'ble the Minister of Education persists in proceeding with the University Reform Bill, in spite of the adverse vote of the Senate and without further reference of the amended Bill to the Senate for its opinion.

In doing so, the mover remarked that he quite recognised that the Bill was already on the highway to become a law of the land. Although the Senate was likely to die very soon, it had a right to die protesting. He thought it was a slight to the

Senate that the Minister for Education, after having sent the Bill to them, should have acted as if the Senate did not exist at all. The Minister was contented, as Mr. Lloyd George was, in getting the opinions of individuals, in receiving informal deputations and in summoning informal Conferences. He reminded the House that the Minister did not send the Bill to the Senate voluntarily. The Syndicate suggested that the Bill might be placed before the Senate for its opinion. The mover then referred to the discussion of the Bill at the last meeting and pointed out how the Senate adjourned the consideration of the Bill. They were anxious to help the Minister, but they were practically given 'a slap on the cheek.' He felt it his duty to take advantage of this opportunity and point out the reasons why he asked the House to accept his motion. It was not on any ground of sentiment or wounded susceptibilities. If they could not influence the course of the legislation of the Bill, at least they had to utter their warning. The speaker went on to quote from the speeches of Mr. Ramunni Menon and Rev. Macphail who were specially appointed to support the Bill in the Legislative Council, when the Vice-Chancellor remarked that the criticism had no relevance to the proposition. Continuing, Mr. Satyamurti stated that in the scheme, as propounded by the Sadler Commission, the mofussil colleges were not placed in the position to which they would be reduced by the Bill. The Sadler Commission had emphasised that some of the mofussil colleges ought to be recognised from the first as University Colleges in order that they might grow up into future Universities. The Bill ought not to go forward in the Legislative Council without a dissent from the Senate. It was not a vote of censure. It was merely fulfilling their duty.

Prof. K. B. Ramanathan seconded. Mr. L. O. Hodgson, Director of Public Instruction, Travancore, remarked that the position was quite obvious.

Khan Bahadur Muhammad Osman Sahab in

opposing the motion observed that the resolution was not going to serve any useful purpose. The Minister had given the Senate sufficient time in which they could have given their opinion. He was perfectly justified in ignoring the opinion of the Senate when it was trying to obstruct the passing of the Bill. The motion to refer the Bill to a Select Committee had been carried unanimously in the Legislative Council.

Mr. Hodgson said that the matter was so obvious that the resolution must be passed.

Mr. K. V. Rangaswami Iyengar said that he was sorry that this resolution had been brought forward. The Minister of course took the entire responsibility for any measure that he brought forward in the Legislative Council. The Senate in its own sphere was entitled to arrive at its own decision and in that connection, they had no quarrel with the Minister for Education. To cut short the possibility of discussion in the Senate was not a democratic measure consistent with those principles in virtue of which they now had a change of Government in the control of higher education which was vested in the Minister. Personally he would ask Mr. Satyamurti not to press his motion.

Mr. R. G. Grieve supported this view and appealed to Mr. Satyamurti not to press the matter.

The resolution was then withdrawn.

Mr. P. R. Swaminatha Aiyar rose to move the following resolution of which he had given notice:—

That the Senate recommend to the Syndicate to so alter the existing Regulations as to facilitate *bona fide* teachers appearing for higher examinations in Arts, consistently with the Universities Act—Act No. VII of 1904—and to place the altered Regulations for consideration at the following meeting of the Senate.

The Vice-Chancellor ruled the motion out of order on the ground that the motion was not clearly worded.

The meeting then terminated.

A Manual of Arithmetic

By the late MR. S. RADHAKRISHNA AIYAR, B.A.,

Principal, Maharajah's College, Pudukotah.

Approved as a Text-book for all Classes and Forms.

Vide Fort St. George Gazette, 24th Jan. 1907.

Very useful for School-Leaving Certificate Examination
12th Edition (1921). Price Rs. 2.

SRINIVASA VARADACHARI & CO., TRIPLICANE, MADRAS.

THE MADRAS UNIVERSITY BILL.**REPORT OF THE SELECT COMMITTEE.**

We, the undersigned members of the Select Committee appointed to consider Bill No. 10 of 1922 (A Bill to provide for the reorganization of the Madras University), have the honour to submit the following report :—

1. The Select Committee had four sittings on the 1st, 2nd, 7th and 8th December and finally met on the 9th idem to consider its report.

2. The Bill was published in the Fort St. George Gazette in English on 17th October, 1922.

3. A representation from the Madras Teachers' Guild was placed before the members of the Select Committee and considered by them.

4. There was some discussion as to the definition of affiliated and constituent colleges. It was suggested that the limit of the University may be removed and constituent colleges recognized outside the limit. The Committee by a very large majority felt that it would be violating one of the fundamental principles of the Bill if the suggestion were accepted. It was further suggested that provision may be made in the Bill recognizing certain colleges as the nuclei of future Universities. The Committee rejected the proposal as it would be invidious to make such a selection.

5. The Committee decided following the precedents of modern Universities both in Great Britain and India to have a Pro-Chancellor and provided that the Minister of Education should be the Pro-Chancellor *ex officio*. Section 10 of the Bill relating to the election of the Vice-Chancellor has been modified giving the power of appointment to the Chancellor from among five persons selected by the Senate, the pay being fixed by the Senate and not by the Chancellor.

6. The Committee generally felt that the Senate could, with advantage, be a larger body and has increased the representation of both the academic and the non-academic elements therein.

7. With a view to remove the apprehension that mofussil interests may not receive adequate attention at the hands of the Senate, each district is allowed to send two representatives to the Senate.

8. Consequent on the increase of the strength of the Senate, its representation on the Syndicate has been increased from six to eight. The number of representatives of the Academic Council and the Council of Affiliated Colleges on the Syndicate has been increased from two to three, while the provision as to electing two members by the Principals of affiliated colleges has been dropped. An extra seat is provided for nomination by the Chancellor to safeguard the interests of communities not otherwise adequately represented.

9. The constitution and powers of the Academic Council which were provided in the Schedule by the Statutes have been brought into the Act as they were considered of sufficient importance to be fixed or altered only by the Legislature. The composition of the Academic Council was increased by the addition of a larger representation of the teaching element both from constituent and affiliated colleges as the Committee felt that unlike the Senate which was a governing and administrative body, the Academic Council should, as far as possible, be composed of academic persons representing various subjects of study.

10. The Committee by a majority decided to delete the provision requiring the assent of the Chancellor to Statutes passed by the Senate. The Committee unanimously decided that ordinances need not be subject to the veto of the Chancellor but that a mere suspensory power till the ordinances were considered by the Senate, was sufficient.

11. The term 'regulations' has been introduced for describing the rules made by the Academic Council, and provisions similar to those relating

to ordinances have been made regarding their enactment.

12. It was proposed that the provisions regarding the composition of the Council of Affiliated Colleges should be brought into the Act so as not to give freedom to the Senate to change the composition by statutes from time to time. The proposal was not acceptable to the Committee. It was further suggested that provision may be made for the dissolution of the single Council of Affiliated Colleges by the Senate and the creation in its place of two or more councils for different groups of districts. It was urged in support of this suggestion that a single council was an unwieldy body and that the interests of the affiliated colleges in the North were not identical with those of the affiliated colleges of the South, and that further the formation of such different councils would facilitate the development of future Universities. On the other hand it was pointed out that the value of the recommendations of the Council of Affiliated Colleges would be lessened if there were several Councils sending up perhaps different proposals to the Senate and to the Syndicate, and that there would be a consequent loss of co-ordination of effort on the part of affiliated colleges and those interested in them. The Committee negatived the proposal. It was next urged that there should be an Executive Committee of the Council to carry out the largely increased powers proposed to be given to the Council, and that a separate fund should be created for the Council of Affiliated Colleges to which should be credited the income from fees, endowments, grants and the contributions of the Local Government. In support of the proposition to set up an Executive Committee for the Council of Affiliated Colleges it was urged that the powers of the Council should be largely enhanced and should include the power to prescribe separate courses of study for the students of affiliated colleges and to conduct separate examinations. It was pointed out that the mofussil educationists that were consulted on the subject

were entirely against the prescribing of separate courses of study or the holding of separate examinations for mofussil colleges. It was then urged that an immediate separation in these two matters was not contemplated but that provision may be made for the ultimate holding of separate examinations and prescribing of separate courses of study for these institutions and that power may be taken in the Act for the purpose. The Committee felt, however, that even a permissive power like that would be misunderstood as aimed at lowering the status of affiliated colleges and consistently with the emphatic declaration that had been made in the Legislative Council that separate examinations and separate courses of study for constituent and affiliated colleges was not contemplated either in the present or in the immediate future, the Committee did not accept the proposal. Consequent on this decision, the Committee felt that there was no necessity to constitute an Executive Committee for the Council of Affiliated Colleges and that all practical purposes would be served by the provision for the formation of Standing or other Committees which was embodied in the Act.

13. It was further provided that, in addition to the present functions, the Council of Affiliated Colleges may make proposals to the Syndicate for the co-ordination of the teaching resources in suitable mofussil centres and the development of academic life with a view to the formation of new Universities and generally to advise the Academic Council and the Syndicate regarding courses of study and examiners. It has also been provided that the Council may lay before the Government its proposals for the financial provision to be made for affiliated colleges and generally to advise the Government regarding the distribution of grants to affiliated colleges. The composition of the Council of Affiliated Colleges was slightly changed giving representation to the Principals of Second-grade colleges and to each one of the districts.

14. Regarding the transitory provisions, the Committee felt that the powers conferred on the

Vice Chancellor by the draft were rather excessive. The clause has been suitably amended requiring the Vice-Chancellor to constitute the several authorities of the University within a definite period and allowing the existing regulations to continue in force until the new authorities had framed their Statutes, Ordinances and Regulations.

16. A section has been added requiring the Senate to submit a report to the Local Government on the condition of affiliated colleges and on the question of creating other Universities outside the limits after a period of five years from the date of the Act. This provision was made so as to cast a positive obligation on the Senate to review the position of affiliated colleges, their condition and circumstances at least after a period of five years.

17. The changes made by the Select Committee are printed in clarendon type throughout the Bill.

18. The Committee do not consider that the Bill has been so altered as to require republication and does not therefore recommend its republication.

(Sd.) A. P. Patro,
 " C. P. Ramaswami Iyer,
 " W. Meston,
 " M. Ratnaswami,
 " O. Thanikachala Chetty,
 " Muhammad Usman,
 " K. Ramunni Menon,
 " P. Subbarayan,
 " T. A. Ramalinga Chettiar,
 " R. Venkataratnam,
 " A. T. Palmer,
 " E. Monteith Macphail,
 " R. G. Grieve,
 " A. Ramaswamy Mudaliar,
 " S. Arpudaswami Udayar,
 " G. Vandanam,
 " S. R. Ankineedu Prasad Bahadur,
 " C. R. Reddi,
 " M. Krishnan Nair,
 " A. Ranganatham,
 " C. V. S. Narasimharaj,
 " A. S. Krishna Rao,
 " M. Ramachandra Rao.

MINUTES OF DISSENT.

(1)

I sign the report, but do not approve of Clause 10 (1), which makes the Hon'ble the Minister for Education *ex-officio* Pro-Chancellor of the University. In my opinion, the Minister should not be subjected to the risk of finding himself in a position where he may be unable to secure support in the Council for a measure which he strongly approved of in the University. Also, I do not agree to Clause 14, Class III (1), which prescribes the principle of proportionate representation in the case of election by registered graduates only. The principle should be made applicable to all elections under the Act.

18th December, 1922. A. RANGANATHAM.

(2)

The Bill, as amended in the Select Committee, retains most of the features to which objection was taken when it was introduced into the Council, and some of the alterations made in the Select Committee have made the new organisation of the University even more unacceptable than it was under the Bill.

The scheme of University reform formulated by the Sadler Commission was designed to meet the peculiar conditions of the Presidency of Bengal. They discussed various methods for affording relief to the Calcutta University, and amongst them was the creation of new Universities at various mofussil centres. The Commission came to the conclusion that "there was no college in the mofussil that was as yet ripe to be transformed into a University". They also found that the proposal for a University of Bengal for the areas outside the City of Calcutta was unanimously rejected by representative Conferences who asserted their desire to maintain their connection with the University of Calcutta. The Commission, after weighing every practicable alternative, came to the conclusion that "the only immediate solution of the problem was to be found in some form of association between the mofussil colleges and the University of Calcutta," and, for that purpose, they pro-

posed the establishment of a Mofussil Board which would leave to the mofussil colleges under its jurisdiction the maximum degree of freedom, while freeing the teaching University as far as possible, from the entanglements of an affiliating system. The circumstances in this Presidency are entirely different. For several years, public opinion in this province has favoured the formation of new Universities, and the demand for them was put forward in the various Conferences from time to time. The matter was brought up for discussion in the Legislative Council more than once, and about a year ago, the Government appointed a Representative Committee to go into the question, and the report of the Committee recommending the formation of a new University for the Andhra Districts has been in the hands of the Government for several months. The Senate of the Madras University also suggested in October 1921, the formation of new Universities on linguistic lines, and the immediate establishment of a new University for the Andhra Districts.

Under these circumstances, the natural line of reform was to make a clean cut, and to reduce the present jurisdiction of the University of Madras as recommended by the Andhra University Committee. This would have avoided the complexity of organisation embodied in the Bill. It is therefore unfortunate that the Bill still maintains the unwieldy territorial jurisdiction of the University and that a form of administration specially devised to meet public opinion in Bengal should have been adopted in the Bill in regard to the administration of the affiliated colleges, notwithstanding the fact that opinion in this province has unanimously favoured the establishment of new Universities as the only sound measure of decentralization.

2. Even apart from this view the position assigned in the Bill to the Council of the Affiliated Colleges is a very serious departure from the proposals made by the Sadler Commission for the Mofussil Board for the purpose of controlling and

regulating the mofussil colleges. The scheme outlined by the Commission was intended to secure for the mofussil colleges a certain degree of academic autonomy and adaptation of courses of study to their own resources and to the needs of their students under the aegis and supervision of the teaching University of Calcutta. The Commission suggested that the Mofussil Board should have some real independence and responsibility in shaping the courses normally pursued by the mofussil colleges, subject, however, to the review of the Academic Council, that it should have the power of conducting all examinations of the mofussil colleges, to recommend examiners for appointment by the Executive Council of the Senate, and to propose arrangements, when desirable, for the use of the same papers used in the corresponding examinations of the teaching University and for the appointment of the same examiners, that the Board should have funds at its disposal, including the receipts from the examination fees, and any grants made for this purpose by the Government. These funds are to be kept separate from the other funds of the teaching University, and to be expended in the interest of the mofussil colleges. It was also the view of the Commission that there should be a different budget of receipts and expenditure, and that the Mofussil Board should have an Executive Council to carry on its work. In fact, the Mofussil Board was to deal with the educational requirements of the colleges situated beyond the limits of Calcutta, and the functions and the constitution of the Board were so devised as to secure a certain amount of association with the Teaching University of Calcutta, while, at the same time, giving into the hands of the Board substantially the management and the control of the colleges in the mofussil. The constitution of the 'Council of Affiliated Colleges' under the present Bill can only be justified if some such functions are assigned to it. Under the present Bill, the Council will not perform any of these functions. The reason for this

change has not been made clear to us, but some reference has been made by our colleagues to a consultation with mofussil educationists on the subject. From the note furnished to us, it is clear that the Conference consisted of a casual consultation with six Principals of mofussil colleges who happened to be in Madras for another purpose. It is evident from the note that the issues were not placed before them clearly, that no resolutions were adopted, that there was no report of the proceedings except the note of the Director of Public Instruction of what took place at the meeting. The note says that the Principals suggested that the provision was necessary in the Bill for separate examinations and courses of study being instituted in the future if the trend of academic events showed that this was desirable. Our colleagues would not accept this unanimous expression of opinion on this matter. It is also clear from Father Carey's note appended to the Director's note, that the proposals then discussed were seriously misunderstood. In these circumstances, we are not prepared to accept the statement that mofussil educationists were against the proposals referred to in paragraph 13 of the report in regard to the functions and powers of the Council of Affiliated Colleges. In the Bill, as originally published for public criticism, some of these powers were proposed to be conferred on the Council; provision was also made therein for the constitution of a fund to be administered by the Council and for a separate annual budget, and for the separation of these funds from the general funds of the University; and a further provision was also made for a separate Executive Committee for the Council. This scheme of functions and powers has been abandoned, and the Bill now assigns very subordinate duties to the Council.

The Council will have under the Bill, no funds to administer, and consequently, no Executive Committee to look after its affairs. In fact, the Council of Affiliated Colleges will be a minor body in the organisation of the University, with

advisory functions. The constitution of a Council consisting of nearly 100 members representing mofussil colleges, the teaching profession, the District Boards and Municipalities, Professors of Universities, and various other members, merely for rendering advice of the character mentioned in the Bill, to the Syndicate and the Academic Council, is altogether unjustifiable. It will not be a real link between the mofussil colleges and the University, nor will it take a legitimate share in the control and management of mofussil colleges. It will be a sheer waste of time and of public funds to constitute a Council such as that proposed in the Bill. There would be no real decentralisation of the functions of the present University, and the position of the mofussil colleges under the new constitution would be much worse than under the present Act. We also feel that a single Council for all the mofussil colleges throughout the Presidency may prove to be unwieldy and may not function to the best advantage of the mofussil colleges. It was suggested by us that the Senate should be empowered, if the necessity arose in future, to constitute two or more Councils for different groups of districts. The councils so constituted will not exercise different functions, and if they consider it necessary to make different proposals to suit their own peculiar conditions, they ought to be enabled to do so. The constitution of different Councils for different groups of districts would, in our opinion, be the most suitable way of promoting the formation of new University centres as quickly as possible, and we regret that our colleagues have not been able to agree with us in this matter. It was also suggested by the Sadler Commission that during the period of transition, the stronger and the more progressive colleges in the mofussil should be differentiated without injustice to the rest, and be recognised as potential Universities, thus giving them opportunities of further development and of appealing to the patriotism and public spirit of their districts. The Sadler Commission stated that these colleges

should be known as University colleges. We feel strongly that there are in some of the mofussil centres, colleges whose standard of equipment and general efficiency is equal to the constituent colleges in the City of Madras, and which should be definitely recognised by the Senate from the outset as potential University centres. We are of opinion that statutory provision should be made for the recognition of such colleges and that such a step would bring about the desired reform earlier than otherwise. We regret that our proposal in this respect had not met with the approval of our colleagues.

3. We desire to invite attention to another aspect of the scheme outlined in the Bill. Considerable apprehensions are entertained by those responsible for the well-being of the mofussil colleges that the constituent colleges in the City of Madras would be regarded as the real University under this Bill, and would absorb all the available funds for University education, and that the colleges in the mofussil would be starved for want of funds. Even as it is there has been a complaint for several years that the mofussil colleges do not receive their legitimate share of the public funds by way of grants-in-aid, and that the colleges in the City of Madras are able to get a disproportionate amount of grants every year. Even the Government colleges at Rajahmundry and Kumbakonam have seriously suffered in this respect and additions and improvements advocated in the matter of accommodation, equipment and staff have remained unattended to for some years for want of funds. This disparity has existed for several years, and has formed the subject of complaint both by the managers of the institutions and also in the Legislative Council.

Past history of the subject does not, therefore, justify any hope that any better treatment would be accorded to the colleges in the mofussil in future. The professed object of the Bill is the establishment of a residential and teaching University in the City of Madras and the separation of

the mofussil colleges therefrom. Genuine fears have been entertained throughout the Presidency that whatever funds are made available by the Government for University education would be devoted to a very large extent to making the project of a residential and teaching University a success, and that the constituent colleges would receive preferential treatment. Similar apprehensions were expressed when the Calcutta University Commission investigated the problem in Bengal. They came to the deliberate conclusion that the constituent colleges in Calcutta receiving grants-in-aid would put forward new demands in consequence of the reforms advocated by them, that the University would also put forward large demands for expansion and development, and that similarly, demands for assistance from mofussil centres would come which would have to be met. They considered it important that all these demands should be laid before the Government at the same time and in a co-ordinated form that financial needs of higher education in that province as a whole should be considered; that they should be accompanied by the comments and criticisms of a body capable of taking into consideration the needs of the whole province and the relative importance of the various demands. They, therefore, recommended that all requests for financial aid from Government by Calcutta colleges, mofussil colleges and from even Government colleges should be forwarded to the Government through the Executive Council of the new University organisation recommended by them which, under the present Bill, corresponds to the Syndicate. It would thus be clear that the Commission contemplated co-ordinated action in the distribution of the funds available amongst the three agencies, namely the University, the constituent colleges in Calcutta, and the mofussil colleges. The needs of all the three have to be considered together with a view to secure not only a fair distribution of public funds amongst them, but also to prevent the development of any one of

them at the expense of the other two. The Bill has made no provisions for an equitable distribution of funds, and in view of what has transpired in the past and the very serious apprehensions entertained in this respect, we consider that statutory provision for the constitution of a Committee in which all the interests are represented should be made in the Bill to examine the needs of University education from time to time and to advise Government in the allocation of the grants in order to meet them. Unless some provision of this sort is made, we consider that the proposals in the Bill will be altogether unacceptable to those in the management of the mofussil colleges, and that the yearly allotments for University education would be mostly distributed among the constituent colleges and the University. The Bill, as amended by the Select Committee, merely provides for the Council making representations to the Government about the distribution of grants only to the affiliated colleges. There are no provisions in the Bill for ascertaining the relative needs of the University, the constituent colleges and the affiliated colleges, and to make a suitable distribution of the available funds between all the institutions. The constituent colleges and the University will look to their own interests and approach the Government direct for assistance. Apart from other reasons, the concentration and co-ordination of resources in higher teaching and research which it is the object of the Bill to promote can never be carried out unless there is a co-ordinated plan in the distribution of funds for future development. A single authority to co-ordinate all these requests and able to view the problem as a whole, and to advise the Government is very desirable. Our considered opinion, therefore, is that without a proper co-ordination of the financial resources of the Government for securing a proper distribution of public funds among the three classes of institutions, the establishment of a teaching and residential University is certain to divert the funds available for University education,

more and more to the colleges in Madras, and the establishment of new University centres in the mofussil would be seriously retarded, if not altogether prevented.

4. The provisions relating to the Senate as modified in the Select Committee are also unsatisfactory. The Senate under the proposals of the Select Committee would consist of about 180 or 200 persons. Of these 55 would represent local bodies, viz., the Madras Corporation, the District Boards and the mofussil municipalities. There are precedents elsewhere in the Charters of some of the Universities where municipal corporations contributing to the funds of the University are given the power of representation and a similar privilege may be accorded to the local bodies in this province but not without any contributions from them. The *ex-officio* and the nominated element in the Senate would be about 60 or 65 and this would be about one-third of the total strength of the Senate. There is no justification for this either. The Sadler Commission expressed the opinion that the nominated element of the Senate should occupy a subordinate position. The method of election by single transferable vote is adopted only in the election by registered graduates and not in the case of the other constituencies. No provision has been made in the Bill for the representation of bodies and associations promoting cultural work in this Presidency.

5. The provision made by the Select Committee for the appointment of a Pro-Chancellor is also unnecessary. Our colleagues are also of opinion that the Minister of Education should be the Pro-Chancellor of the University *ex-officio*. The aim of University reform has been to free the Universities as much as possible from the control of Government and the appointment of the Minister of Education as the Pro-Chancellor is without precedent and is a fundamental departure from the principles of the Bill.

6. Under the Bill, as originally introduced, the Vice-Chancellor was to be elected by the Senate

from among persons recommended by the Syndicate subject to the confirmation of the Chancellor. This provision has also been altered by our colleagues and the Chancellor has been empowered to appoint the Vice-Chancellor from among five persons recommended by the Senate. We see no justification for depriving the Senate of the power of appointing its own Vice-Chancellor and transferring this power to the Chancellor. There are other objectionable modifications in the constitution of the various authorities of the University to which we need not refer at any length, which are prejudicial to sound University administration and to the growth of an autonomous University.

7. Finally the professed object of this Bill is the establishment of a teaching University in the City of Madras and it has been stated that the affiliating functions of the University are only temporary. It is, therefore, necessary that this should be frankly recognised in the Bill by limiting these functions to a period of five years. This step will force attention to the subject of the early formation of new Universities. The Bill has not been referred to the Senate and we have not had the benefit of the considered opinion of the chief authority in University education in this Province. It has been brought forward for consideration without arriving at a decision on one of the most vital points of University reform, namely, the position of the Intermediate colleges in the future organisation of education in this Presidency. The construction of the system of University organisation embodied in the Bill is so far reaching in its scope and would so vitally affect the future of University education in this Province that we feel no doubt whatever that an early review of the position created by the provisions of the Bill after it becomes law would become necessary. We are also of opinion that the changes introduced in the Bill at the Select Committee stage are of sufficient importance to render its republication necessary.

18th Dec. 1922.

{ M. RAMACHANDRA RAO.
C. V. S. NARASIMHA RAJU.

(3)

The Bill provides for the creation of a teaching and residential University in Madras with constituent Arts and professional colleges within a radius of ten miles and with affiliated colleges scattered over the entire length and breadth of the Madras Presidency, out of which are to spring up, future other local teaching and residential Universities. There can be no valid objection, no reasonable opposition, to the scheme of starting a teaching and residential University in Madras provided suitable provisions are embodied in the Bill for translating into action, in the not distant future, the wish expressed in the third Clause of the Preamble that "it is desirable by the concentration and co-ordination of resources for higher teaching and research at suitable centres outside the limits of the University, to prepare for the institution of new Universities." It is true the Bill, as amended by the Select Committee, empowers the Council of Affiliated Colleges to make proposals to the Syndicate for the co-ordination of the teaching resources in suitable mofussil centres and the development of academic life with a view to the formation of new Universities. But this does not go very far. No new Bill is required, no Council of Affiliated Colleges need be called into being for recommending co-ordination of the teaching resources which, under the present Act, can be readily effected by mutual agreement between the Principals of First-grade Colleges in any given centre. The real thing wanted, that which will, in the near future, lead to the institution of local Universities is the determination and selection by the Local Government in consultation with the Senate or the Syndicate and the Council of Affiliated Colleges of what are deemed suitable centres so that, simultaneously with the institution of the teaching and residential University in Madras, University centres in other parts, one at least for each principal linguistic area may be formed, enjoying, as the Calcutta Commission Report recommends, a certain degree of autonomy in the planning of their courses and the conduct

of their examinations. These University centres will consist of colleges or groups of colleges providing facilities for higher specialized courses and research work and therefore occupying a rank or status equal to that of a constituent college of the University. The courses and examinations need not necessarily be different in the beginning. The different University centres may be given the option of having the same courses and examinations as the University or, of specializing under the tutelage of the present University, in certain courses not provided for by the University but better suited to local requirements and better adapted for the development of local resources. The University may, through the Council of Affiliated Colleges, issue, from time to time, such instructions as may be found necessary for maintaining the same high standard or level of efficiency as obtains in the constituent colleges.

The institution, therefore, of University centres, Universities inchoate or potential Universities, as the Calcutta Commission's Report terms them, cannot be delayed. Provision should be made for them, and for the machinery which has to bring them into existence, simultaneously with the University, in the body of the new Bill. My reasons for suggesting this course are as follows :—

(1) The simultaneous institution of University centres will quicken and intensify culture and academic life in the mofussil and will, by fixing beforehand certain nuclei of future Universities, rouse up, on the one hand, local patriotism and philanthropy to provide the necessary funds and means for future Universities and, on the other, serve as pledges of the good-will of the University towards the mofussil.

(2) The present University is far too unwieldy, it is said, to promote intensive training or provide for greater efficiency in advanced courses or afford enlarged scope for specialization in higher research work. The new Bill does not mend matters by seeking to increase efficiency in Madras by means

of University teaching and efficiency in the mofussil by a system of examination.

Nor does it relieve the University of its unwieldiness. For the teaching University in Madras is required to give the very best kind of teaching it can provide within the ten-mile limit and at the same time supplement the teaching provided by the affiliated colleges. To these teaching functions are also added the functions of an examining body. These inconveniences are removed by the institution of University centres. They will increase efficiency in their respective areas and thereby contribute to the efficiency of the parent University. They will serve as effective barriers against the unification or centralisation, as it were, of all courses, and of the subordination of all initiative, of all individual tastes and inclinations to the rigorous demands, of one standardized system of examinations.

(3) If purely educational considerations were kept in view, these centres should be welcomed as forming an intermediate stage. From the broad stage of a Presidency-wide University to the final stage of multiple local Universities normal development requires an intermediate stage. This represents the stage at which University centres should be started, developed and improved until like ripe fruits they could separate themselves from the parent tree and grow into separate plants and trees having their own separate existence and life, or until like tutored children develop and attain the age and position when they could live by themselves and be really independent. This is the radical defect of the present Bill. It disregards the laws of nature. Should this plan of the intermediate stage be adopted, Madras will lose nothing. It will have its ten-mile limit. It will enjoy its place of precedence, its place of honour as the metropolis. It will still be the better provided seat, the headquarters of the University, the exclusive centre for a long time for Engineering, Law and Medicine. The imposition of the ten-mile limit will not then give it the aggressive, exclusive

and anti-mofussil character which it now assumes by law. The re-organization of the University on the lines here suggested, on the principle of a natural transition from the intermediate to the final stage, will permit of any one of the University centres becoming a distinct University without injury to the other parts of the University. But the re-organization effected by the Bill is a violent operation, the cutting off, as it were, of the head from the members.

The Council of Affiliated Colleges must be armed with powers, to become an effective instrument, in conjunction with the Local Government and in consultation with the Senate or the Syndicate, to select and develop these University centres. For this special purpose, and for the general purpose of safeguarding mofussil interests which slightly differ in the different linguistic areas, it is highly desirable that there should be two Councils of Affiliated Colleges, one for the North and one for the South.

The following were the chief functions which the minority at the Select Committee wished to assign to these Councils :—

"(a) The Council shall have a fund to which shall be credited (1) the income from fees, endowments and grants, if any, (2) contributions from the Local Government under the provisions of Section 44 of the Bill in respect of institutions transferred to the Council, (3) contributions from the Local Government for instituting professorships, readerships, lectureships and any other teaching posted and generally for the promotion of higher research and advancement and dissemination of knowledge in particular branches of learning."

"(b) The Local Government shall also contribute annually to the fund a sum to meet the recurring expenditure of office establishments maintained by the Council and the travelling charges of the members of the Council."

There were two other resolutions which the minority failed to pass through the Select Committee, viz. :—

"(a) After the commencement of this Act, the Senate shall appoint a commission to inspect the affiliated colleges and report to the Senate which of such colleges should be recognised as maintaining standards in teaching, equipment and general efficiency equal to the constituent colleges in the University and to frame regulations for the recognition from time to time of such colleges as potential University centres."

"(b) Such affiliated colleges as in the opinion of the Senate maintain the standards equal to those of the constituent colleges of the University shall be styled 'University colleges' and shall thereafter be entitled to all the privileges of the constituent colleges in the University till they are transferred to other Universities."

Putting all these amendments together, it will, I think, be readily conceded that the minority did not suggest any utopian scheme when they proposed to safeguard mofussil interests and to pave the way for the institution of future local Universities by recommending what appears to be the most practical and natural method of maintaining and improving the standard of efficiency of the stronger mofussil colleges and of providing them with the means of developing into independent local Universities. Any dislocation or interruption, however temporary, of existing facilities for advanced courses in the mofussil, must inevitably result in the stronger mofussil colleges falling behind, and becoming a drag on the constituent colleges and the chances becoming more and more remote of the necessary conditions being created for the institution of local Universities. The question becomes really one of "Now or Never."

The proposal of two Councils, one for the North and one for the South, is a step in the right direction. The disadvantages referred to in the Select Committee Report are not really so serious as to outweigh two chief advantages claimed for them. The first is the enthusiasm and earnestness which a Council working in a linguistic area can bring to bear upon its work, the first-hand knowledge and information which it will have of the *modus*

operandi of the stronger mofussil colleges within the area, their equipment, staff, scope for development and for providing facilities for post-graduate studies and research work, their needs and requirements and the nature and amount of financial assistance needed for their fulfilling the conditions of constituent colleges of a future University. The second is the effectual appeal which it can make to popular sympathy. People living in a linguistic area will respond eagerly to a call made by educationists of their own area for the development of the stronger colleges situated therein, will take a natural pride in financing them, in the well-founded hope that one or two of them at least may develop into local Universities providing the higher specialized courses which will suit the cultural demands of the area.

18th Dec. 1922. S. ARPUDASWAMI UDAYAR.

(4)

There are fifty-seven colleges affiliated to the University of Madras of which twelve are in or near the City of Madras and forty-five outside the City of Madras. The establishment of a teaching University with the ten-mile limit provided in the Bill, cannot but affect the position of the mofussil colleges. The modifications made by the Select Committee have not improved the position of the mofussil colleges to any substantial extent. There are no safeguards to ensure that the mofussil colleges would get financial assistance from the Government even to the present extent, though even such assistance would not be sufficient to enable those colleges to make adequate provision for higher teaching and research as contemplated in the Bill. It must be admitted that the mofussil colleges have hitherto received a sort of step-motherly treatment at the hands of the Government in the distribution of grants. In 1920-21 seven First-grade Colleges in the mofussil were given a total grant of Rs. 61,718, whereas two colleges alone in the City of Madras received a total grant of Rs. 65,154. The number of pupils in the First-grade Colleges is

fairly divided between the Madras City and the mofussil districts. It is true that in the First-grade Colleges in the Madras City, the number of pupils from the mofussil districts is much larger than the number of those from the City. But that cannot in any way affect the claim of the mofussil colleges to a more just and equitable treatment in the matter of the distribution of grants. It is quite necessary to incorporate suitable provisions in the Bill to safeguard the interest of the affiliated colleges and to ensure that their needs will be satisfied to a reasonable extent and in a reasonable manner, before increased financial provision is made for the benefit of the constituent colleges.

2. The financial provisions made in Clause 43 of the Bill are utterly inadequate to cope with the demands of the new teaching University. The success of the measure will depend on the grants placed at the disposal of the University for carrying out reforms in the present system of the University education. It is necessary to make more liberal provision for that purpose besides making grants for the salaries of the Vice-Chancellor, special University teachers and for the development of the laboratory, library, museums and workshops.

3. I do not consider it necessary to provide in the Bill for a paid Vice-Chancellor, due regard being had to the limited funds available for University education. It is provided that the Registrar will act as the Secretary of the Senate, the Syndicate, the Academic Council and the Council of Affiliated Colleges. He is or may be invested with all powers necessary for the administration of the affairs of the University. His position may be recognized in the Act itself and he may be provided with a decent salary. A further provision for the payment of salary to the Vice-Chancellor appears to be more a luxury than a necessity. The Bill as originally introduced provided that the Vice-Chancellor shall be elected by the Senate from among the persons recommended by the Syndicate, subject to the confirmation of the Chancellor. It

was felt that there was no justification for restricting the choice of the Senate to the persons recommended by the Syndicate. The alteration effected by the Select Committee in the provision made for the appointment of the Vice-Chancellor has made the position worse than before. It deprives the Senate of the right to elect the Vice-Chancellor and confers the powers on the Chancellor, with the limitation that he shall appoint from among five persons recommended by the Senate. This is a serious curtailment of the power of the Senate in the matter of the appointment of its chief executive officer, the Vice-Chancellor.

4. One of the chief complaints against the present Madras University is that it has grown very unwieldy and that it cannot satisfactorily control University education over the whole Presidency covering such a very wide area. The first reform to be effected in the present system of University education is to reduce the size of the Madras University and to establish Universities in other centres. The present Bill is not calculated to achieve that object, notwithstanding the alterations made by the Select Committee. The question of the establishment of the Andhra University has reached a stage, when the delay in the progress of the scheme cannot but produce serious dissatisfaction in the minds of the people of the Andhra districts. The Senate recommended the establishment of the Andhra University in the first instance. The Government accepted the principle and appointed a Committee to investigate that question. The Committee submitted its report and it is still under the consideration of the Government. A conference of some representatives of the Telugu-speaking districts was held last month and the type of the University was agreed upon. The location of the University would also have been agreed upon at that Conference, but for the absence of representatives from the Chittoor and Ceded Districts, and it is sure to be settled at the next sitting of the Conference. The provision contained in Clause 51 of the Bill making it obligatory on the Senate to

report at the end of five years on the desirability of establishing other Universities cannot apply to schemes in an advanced stage of progress, like that relating to the Andhra University.

5. The Bill does not provide for an adequate representation of the registered graduates of the University who must form the main electorate in any scheme of University Reform. In the original Bill, provision was made for the election of 25 members by the registered graduates out of a total of about 120 members. In the Bill as revised by the Select Committee, provision is made for the election of only 30 members by the registered graduates, out of a total of about 220 members. It is necessary to increase the number of members to be elected by the registered graduates to at least 40. It is necessary that the University should be in close touch with the student population, so as to be able to make adequate provision for their requirements. All registered graduates of five years' standing must have the privilege of electing members to this University. There is no justification for providing that in the case of registered graduates, the election shall be according to the principle of proportionate representation by means of the single transferable vote, when no such provision has been made in the case of other elections.

18th Dec. 1922. A. S. KRISHNA RAO.

(5)

Could I have helped it, I should have avoided a minute of dissent. But the conditions under which a good portion of the work of the Select Committee had to be done made a minute inevitable and obligatory. Almost at the very commencement it was declared by the Hon. the Chairman and several other Hon. Members that the Council had accepted the principle of the Bill as regards the 'limit'; and also the proceedings had not progressed far before it became plain that the Select Committee was, on one important matter, clearly divided into two sections—one comprising those that felt, and the other those

that did not feel—gave apprehensions about the future of the mofussil colleges. Hence most of the suggestions relating to those institutions had to run the gauntlet of the majority; and in more instances than one, the Chairman's casting vote (very naturally given in favour, of the original proposals) decided the issue. How pronounced this difference was, might be surmised from the fact that more (a good deal more) than one half of the main text of the Select Committee's report relates to matters affecting the mofussil colleges. Accordingly it is to those matters, as set out in paragraphs 5 and 13 of the Select Committee's report, that this note will mainly restrict itself. Here I may state that I am in general agreement with the substance of Sections 1, 2, 3 and 5 of the Minute of Dissent, recorded by my Hon. Colleagues, Dewan Bahadur M. Ramachandra Rao Pantulu and Rao Bahadur C. V. S. Narasimha Raju.

2. Section 5 of the Select Committee's report states that two suggestions were made—one for the removal of the "Limit of the University" and the other for the recognition of certain mofussil colleges as nuclei of future Universities; and the report records that both the suggestions were rejected—the first for its violation of a fundamental principle of the Bill and the second for its invidious consequences. It is, however, submitted that what the first suggestion actually desired was not the elimination of any "limit" whatsoever but the determination of really reasonable "limit" in conjunction with the other vital marks of distinction between a so-called "Affiliated" and a so-called "Constituent" college. A reference to definitions (a) and (b) under Section 2 will plainly show how all the authoritative stresses of the legislature is laid on the accident of the geographical position of a college either within or without a certain limit, quite irrespective of the essential distinctions of the methods adopted, the standards maintained and the objects pursued; all these vital matters being left to be 'prescribed' by the authorities of the University. To be sure, this is altogether arbitrary; and if any thing merits to be

styled invidious, it is this method of determining a matter of great moment. The suggestion of the minority was that the distinction between an 'academic' and an 'affiliated' college should primarily be based upon the capacity and the preparedness (or otherwise) of an institution to participate in the 'higher teaching' and 'research' work which the Bill proposes to develop and to respond to the endeavours after that 'academic life' and that 'corporate unity' which the Bill desires to foster. The so-called 'limit' should be determined as a concomitant to those substantial points of distinction. Whereas the Bill starts by making an arbitrarily fixed 'limit'—and therefore, the good luck which places one college within that 'limit' and the hard fate which places another college outside that 'limit'—the initial and basic criterion of the classification. What principle is involved in this method it is hard, indeed, to discover, unless pure convention or sheer convenience be styled a principle. The second suggestion referred to in the same Section (Section 5) of the Select Committee's report, aimed at a distinct provision being embodied in the Bill itself for the establishment of agency whose purpose, from the very outset, would be to lead towards the realization of the second avowed object of the Bill, viz., to prepare for the institution of new Universities. Nothing was more remote from the intention of this proposal than to suggest an off-hand enumeration of colleges to be recognised as nuclei of new Universities that were invidiousness itself. What was actually and expressly intended was that a careful inspection, by a properly constituted body, should first be made of the mofussil First-grade Colleges with reference to their present condition and future possibilities; and then should be prepared a list, necessarily tentative, of institutions that could be aided, by both funds and guidance, to develop high academic standards and the healthy corporate life and thus become University centres. How else the avowed object of preparing for the institution of new Universities could be steadily furthered, it is again

difficult to see. All the same the two proposals were rejected as several others were, without much ado.

3. Some of the other proposals thus disposed of are mentioned in paragraph 13 of the Select Committee's report. One of them was the proposal that the composition of the Council of Affiliated Colleges should be determined, even as its powers were defined, by the Act itself. If two virtually autonomous bodies like the Legislature and the Senate are to function—one for defining the powers and the second for determining the composition of the same body, obviously there is bound to be, with the duplication of the agencies, a complication and even an inarticulation of the details. The Council in question, even with the stinted powers vouchsafed to it, will have very responsible duties to discharge towards mofussil colleges. The authority to define its powers rightly vests in the Legislature; and for that very reason the Legislature alone can judge correctly what the proper composition of that body should be. It may, by the way, be pointed out that the Council of Affiliated Colleges is the only 'authority' of the University which is thus bifurcated between two organs of legislation; every other 'authority' being placed, as to both its powers and its composition, wholly either under the Act or under the Statutes. Next, two other suggestions relating to the Council of Affiliated Colleges are mentioned in the paragraph (No. 13) of the Select Committee's report namely, the setting up of an Executive Committee of that Council and the creating of a separate fund for mofussil colleges. The Select Committee's report states at some length the reasons which weighed with the majority for negating the proposal regarding an Executive Committee; while all that the report has to say distinctly about the other proposal regarding a separate fund is that it was urged by some members but that the Committee did not accept it. Probably the report regards them, and presumably the majority of the Select Committee also viewed them, as so interlinked that they should rise or sink together. But really they are two distinct proposals, one concerned with the modes and the other with the means of operation. Any-

how at no stage of the proceedings of the Select Committee did the difference in aim and, therefore, in opinion between the two sections of the Committee evince itself as being utterly irreconcilable as it did in connection with the consideration of these two suggestions. A set of proposals generally agreed to by at least four, if not by five and even six, members of the Committee and enumerating a series of suggestions bearing upon the powers, functions, funds, composition, sub-committees and other details appertaining to the Council of Affiliated Colleges had then prepared and was presented to the Committee. But the majority decided that the two questions, whether the Council should be given an Executive Committee and whether it should be granted a separate fund, must be voted on and settled before the other proposals regarding powers, function, etc., were gone into. Then it did not take the Committee much time and deliberation to negative the two proposals; and after that one need hardly define the mutual understanding on which the rest of the discussion followed. However, it is submitted that the method adopted was far from the logical or natural. The need for an Executive Committee will depend obviously on the strength or composition of the general body and on the extent and variety of its powers and functions. As revised by the Select Committee, the Council will consist of about eighty members, spread over the whole Presidency; and its functions and powers, however limited and subordinate, are such as to require it to be in constant touch on the one hand with the colleges and on the other with the Syndicate and the Academic Council. They are, to a considerable extent, akin so far as mofussil colleges are concerned, to the functions of the two last named 'authorities'. In view, therefore, of these two considerations, namely, of its composition and of its functions, it is submitted that for prompt and efficient work, an Executive Committee is highly desirable, in fact, indispensable. As regards a separate fund, its imperative necessity is emphatically urged by past experience. It is no exaggeration, I believe, to say that, for a long while during the years bygone, the metropolitan and the mofussil colleges

have been as the Biblical lean and fat kine. Consequently, wide-spread and intense is the fear that in the years to come, with the alluring charms of a so-called residential University, the Madras colleges will claim, and will be conceded, more than the proverbial lion's share, either for themselves or for that University of which they are heirs by primogeniture. Hence, a distinct provision ensuring to the mofussil colleges a just and adequate share in the University funds from all sources is due as a matter of equity and fair dealing. It will never do to treat the mofussil colleges as inseparably integral for financial purposes but as abnormally excrecent for academic ends. The minority, therefore, proposed that the mofussil colleges should receive, and have utilized for their benefit, a part (in proportion to the original contribution by their candidates) of the savings from the fee-income, and that the apportionment of the other funds, as voted by the Legislative Council in the annual budget, should be made on the basis of the suggestions or recommendations of a committee representative of the Syndicate, the Academic Council, the Council of Affiliated Colleges and the Local Government. Just a word or two might be given to the suggestion proposing merely permissive or enabling powers regarding courses and examinations for mofussil colleges. It is submitted that the suggestion made was not altogether different from the power given to the Academic Council by Section 24 (j). The Select Committee's report refers to certain mofussil educationists consulted on the subject being entirely opposed to the proposal. As I am not in possession of detailed information on this consultation, I shall not deny the statement. However, I shall submit that the statement admits of considerable modification in view of the fact that our Hon'ble colleague, Rao Bahadur C. V. S. Narasimha Raju presented a copy of the proceedings of a special meeting of the College Council of one of the leading colleges in the north, which included a resolution asking for mofussil colleges the power to hold their examinations, and also in view of the other fact that the members who submitted the set of proposals above referred to, mentioned that the Principal of a leading college in the South wanted such enabling or permissive powers to be given to the Council of Affiliated Colleges. As for the argument that an emphatic declaration was made in the Legislative Council about separate courses and separate examinations, it may be observed that herein lies the self-contradiction of the Bill, in that it treats the Madras and mofussil colleges as distinctly different classes in the matter of facilities, opportunities, methods and appliances, but all the same wrings them into the

same position as regards courses prescribed and the examinations demanded. It is exactly here that the Bill deflects from the carefully considered line of action prescribed by the Calcutta University Commission's report, which expressly declares that mofussil colleges cannot 'keep step' with Calcutta colleges and that uniform curricula and examinations 'would be unfair to both sides.' Should it be urged, as it might justly be urged, that unlike the mofussil colleges of Bengal, the mofussil colleges of this Presidency could cope with Madras colleges on equal terms, as regards curricula and examinations, does not that admission discredit the division of Madras and mofussil colleges into two distinct classes—constituent and affiliated—on a purely geographical basis?

4. The other points on which I have to dissent may be merely enumerated thus:—

(i) I doubt whether there is a real analogy on this point between the Madras University and those modern Universities which are said to have a Pro-Chancellor. Is the Governor of a Province or a Presidency the *ex-officio* Chancellor there? The acceptance of the Minister for Education as the *ex-officio* Pro-Chancellor further complicates the matter. Is the Hon'ble Minister to be the common Pro-Chancellor for the several Universities which it is the hope or the ambition to establish in this Presidency?

(ii) To my mind it is more than a doubt whether it is natural or businesslike that the 'local bodies' should have fifty-two representatives in the Senate.

(iii) It is clear to my mind that the assent of the Chancellor to the Statutes (only to the Statutes) is highly desirable. The Chancellor is an integral and important factor of the Senate, as he is also the head of the Government which has to co-operate with, and to finance, the activities of the Senate. His assent to the general principles and the main methods of the policy to be pursued, enters into the transaction almost as a matter of right. I fear it will be too sweeping a swing of the pendulum from the pre-requisite of his assent even to petty details and passing exigencies on the one hand to the deletion of that assent even from statutes defining the general policy on the other.

18th Dec. 1922.

R. VENKATARATNAM.

Reviews and Notices.

SHORT ALGEBRA BY H. P. SPARLING, M. A.
(PUBLISHERS: GEORGE BELL AND SONS).

This book deals with the elementary portions in Algebra in about a hundred pages. It contains a series of simple exercises carefully graded and arranged chapterwise, with a few important and indispensable hints given here and there. Verbal explanation of processes is left to be done mostly by the teacher. The introductory examples are self-explanatory and thus the author has managed to do away with the conventional pattern solutions given in most books. The development of the subject has been done in a simple, direct, natural manner with proper correlation and on a concentrated basis. As far as possible, artificial problems have been avoided. The treatment of functions and graphs is specially attractive.

We are of opinion that the book would help the pupils to understand the subject well without feeling it to be dry or bald. The author declares that except for calculus the book covers fully the ground of the School Certificate Examination of the Oxford and Cambridge Joint Board and that it gives a knowledge of the algebraic processes required in Physics, Trigonometry and the Calculus. We agree with him and commend his plan.

So far as the Madras S. S. L. C. standard is concerned it may be stated that the book deals with the portions of Algebra in the present Elementary Mathematics Syllabus and with Logarithms, Quadratic Equations, and Allied Graphs besides. We would hence recommend the book for the use of pupils in our fourth and fifth Forms. We would also suggest that parallel publications

in the other portions in Mathematics written in equally clear and concise form would conduce to popularizing Mathematics among non-specialists.

THE CHILD'S HISTORY OF INDIA IN 3 PARTS FOR FORMS I TO III BY C. S. RAMASWAMI IYER.
MADRAS: MACMILLAN & CO., LTD.

These volumes, which are the production of a teacher of considerable experience, are eminently fitted for use in Forms I to III and in the higher standards of Elementary Schools. While nothing essential has been discarded, care has been taken to avoid a mass of confusing details. Book I gives a general outline of the History of India in easy conversational Tamil and is a fitting introduction for a beginner. The topics and personages selected for the purpose leave nothing to be desired. Books II and III treat the subject in greater detail. The former closes with the fall of the Mughal Empire and the coming in of the first European settlers, while the latter continues the story to the present day and deals with the British period proper. The chapters on the Reforms, Co-operation, Civics and the visit of the Prince of Wales are written specially so as to make the pupils understand them without any difficulty whatever.

The general plan of the series which closely follows the departmental syllabus, the easy conversational Tamil in which the books are written and the practical experience brought to bear upon the work are sufficient recommendation for the use of these volumes as text-books in Elementary and Secondary Schools.

The get-up of these books is very good and the illustrations are excellent. The credit is due to Messrs. Macmillan and Co., who are its publishers.

A Handbook of Manual Training or Educational Handwork in Paper and Card-Board Modelling

(in Tamil)

By S. YAGNASWAMI,
Supervisor of Schools, Namakal.

Book I. Price Rs. 8.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

THE MADRAS UNIVERSITY BILL.*

[BILL No. 10 of 1922].

A CRITICISM.

I

IN this article an attempt will be made to study the University Bill as it was introduced in the local Legislative Council by the Hon'ble the Minister for Education in November last.

Nobody can accuse the Minister of undue haste and of an attempt to rush the bill through. A draft was published clear three months before the Bill was actually introduced in the Council and now after the Select Committee's report has been published, the public have been allowed time for deliberation and expression of constructive criticism before it would be submitted to the Council for final adoption.

Even though the Committee's recommendations together with the two able minutes of dissent, one by Dewan Bahadur Venkataratnam Naidu Garu and the other jointly by Messrs. M. Ramachandra Rao and C. V. S. Narasimha Raju have been published no attempt will be made to critically study this report of the Committee as these recommendations are merely preliminaries to the final stage of the Bill; only such alterations recommended by the Committee as affect sections of the Bill vitally will be noted then and there in the course of the study of the Bill.

The text of the Bill together with the able and illuminating statement of objects and reasons appended, the speech of the Hon'ble the Minister in introducing the Bill, the speeches of the members of the Council about

* This is the second article on the subject. The first article appeared in the November 1922 number of this magazine.

the Bill especially those of Messrs. Arpudawami Odayar, R. Venkataratnam Naidu, M. Ramachandra Rao and C. R. Reddy and the very learned articles on the Bill by Dr. Miller and Prof. K. V. Rangaswami Aiyengar published in the *Christian College Magazine* for October 1922, and in the Annual Supplement of the *Hindu* respectively, together with Mr. Satyamurthi's lecture published in the Madras dailies, will furnish ample materials for a critical and exhaustive study of the Bill in all its aspects and from all possible points of view, favourable, adverse and neutral.

II

That the Bill has been benefited by all the criticisms made upon the original draft, in the press and on public platforms has to be admitted to the credit of the framers of the Bill though there is considerable difference of opinion regarding the actual extent of the changes introduced. Prof. Rangaswami Aiyengar says that "the Bill presented to the Council is in *important details* different from that presented to the Senate three months earlier." "It seems to me", says Mr. C. R. Reddy on the other hand, "in the first place that the difference between the original and the draft of the present Bill are *not fundamental in character*." But we have the statement of the Hon'ble the Minister himself that "constructive criticisms from every quarter were carefully considered and a final draft was prepared for the approval of Government to be placed before the Legislative Council."

Some of the more important alterations are the following:--(1) The old and familiar names of the Senate and the Syndicate are retained in the place of the Court and the Executive

* Italics are mine.

Council of the original draft; (2) The constitution of "all the institution-members of the body corporate of the University, i.e., the Senate, the Academic Council and the Council of Affiliated Colleges, has been altered mostly with a view to give fuller representation and more powers to the moffussil colleges; (3) The Executive Council of the Council of Affiliated Colleges has been dropped; and (4) The Viceroy has been made the *ex-officio* Visitor of the University with ample powers.

We shall be able to appreciate the changes better if we recapitulate the main criticisms levelled against the scheme when the draft was first published and see how far the defects thus pointed out have since been rectified. The critics of the Draft Bill maintained that a change from the existing system of things was uncalled for, that the modifications effected in the constitution of the various academic bodies rendered them more bureaucratic and less responsive and responsible to the popular feelings than at present, that the moffussil colleges are bound to suffer and thus ultimately the cause of higher education in the country as a whole stood more to lose than to gain by the new Bill and that financially it was not a sound scheme.

III

Among those that maintained that a change was uncalled for there were two sections. One section held the view that the existing constitution of the University affords ample facilities for the expansion of the teaching side and if no such expansion has been possible or the attempts already made in that direction have not been sufficient and satisfactory, the poverty of the University is more responsible for it than any constitutional defect. The others held that "a Teaching

and Residential University" is an overworked phrase and that it ought not to be advocated and prayed for until we have satisfied ourselves by a careful examination of our special needs and conditions and that that is the pattern which would be most useful to our country.

The best expert opinion on Education, whether in the East or in the West, ancient or modern, has always attached the greatest educative value to communal life among the teachers and the taught affording ample facilities for the development of social virtues and intellectual capacities of the students and if any criticism was levelled against the conversion of the examining body into a teaching University with examination as a subsidiary item, it was because the critic held, we presume, that we cannot, in our present condition, afford to have as many teaching Universities as would be necessary to meet the demands of the country for higher education and that therefore according to the socialistic principle of half a meal for everybody rather than feast for a few and starvation for many, the present system had better continue.

The former school that held that we have powers under the existing Act to effect all improvements and that therefore there is no necessity for a fresh enactment have not been effectively answered at all. As this goes to the root of the matter we shall discuss this point at some length.

IV

One important point to be borne in mind in this connection is that we in Madras are not starting with a clean slate as in Dacca or at Delhi but have an existing institution with a splendid record and our task is not creation but transformation. That the Universities should be teaching bodies and not mere

examining machines nobody would gainsay. But the question arises 'Teach whom or for what vocation or with what aim and ideal?' This question has not been clearly thought out and definitely answered and much has been left to be done by the Academic Council which will be brought into existence later.

Suppose the University concerns itself with the post-graduate course only whether in Science or in Humanities so far as its teaching department is concerned and continues to keep its present affiliating and examining side so far as the pass course is concerned and suppose that in this latter capacity its relation with a college preparing candidates for a pass degree remains the same whether the college be situated either at Madras or in the mofussil. Then the transition to the Teaching University will be more easily effected and there will be no cause for apprehension to the people in the mofussil.

In the scheme as now contemplated in the Bill, the University, one is led to imagine, as a teaching University will be concerned both with the graduate and post-graduate courses. So much is being said about the pooling of teaching resources and interchange of teachers which is expected to put an end to the present intellectual isolation of the staffs of various institutions. But is such a course possible with regard to the pass degree? Let us take a concrete problem. Let us, in facing the problem, bear in mind the assurance given by the Hon'ble the Minister that the individuality of each of the constituent colleges would be maintained intact and that the University will function only in and through these colleges. Taking the subject of History which seems to be the most popular one among the candidates for the pass degree we

have over 3 hundred students (among the males alone) in all the three colleges of Madras and is it to be expected that hereafter that only one of the three colleges will be allowed to teach students for B. A. Pass in History the others being told off for other branches of study; or that all the colleges will be allowed to prepare candidates for the same subject of History, only the Professor of, say, the Presidency College will handle European History for all the students of the 3 colleges, the Professor of another teaching Political Economy and the third institution contributing its share by way of a Professor of Politics or Indian History? What about the subject of English for all these and for the remaining 4 or 5 hundred students studying the other subjects? Will that subject also be equally distributed or perhaps will each institution be asked to look after all its students, the University Professor or Professors if there be any delivering only a few general lectures? These are questions affecting the nature of the teaching contemplated to be done by the University and we look in vain for any light on these problems either in the Bill itself or in the explanatory speeches of the Minister or of other Hon'ble members.

If on the other hand the University were to concern itself with the teaching of post-graduate students only there will be no dislocation of existing arrangements, no heart-burning to anybody; there will be only a natural development which would be welcomed by all.

This aspect of the question is well emphasised in Dr. Miller's article which coming as it does from that Doyen of South Indian Education who is no sentimental doctrinaire but a shrewd businesslike Scotchman ought to

be considered with all the attention it deserves. Further Dr. John Matthai who "has had experience as a teacher both of the old system in Madras which placed advanced study on a post-graduate basis and of the present system which makes advanced study normally an under-graduate course" says in his learned article on "Post-graduate Course and its Prospect in Madras"* that "his sympathies are with those that question the soundness of the present system". Here is a confession from a professor of no mean standing that the Honours scheme as run at present has not come up to the expectation of its sponsors and that graduates ought to be recruited for post-graduate study as was done formerly. In re-Honours days there was very little of definite instruction and guidance given in colleges to post-graduate students and they had mostly to depend upon themselves. Why at the University organise an elaborate course of post-graduate studies in all important branches, scientific and humanistic, allowing free scope for research and higher study among those whose capacity has been tested, maintain adequate and qualified staff for all branches and run the whole show itself instead of interfering with the pass course? This aspect of the question certainly deserves more careful consideration than it has received at the hands of those responsible for the Bill and its critics.

V

The second serious objection was against the constitution of various bodies. The Senate, it was maintained, was not sufficiently representative; the powers of the Chancellor were too much, he having the right to preside over the Court or the Senate; the Syndic members

were not all elected by the Senate and hence, that body would not always be amenable to the control of the Senate and so on.

The Chancellor's powers have not been modified nor the claims of registered graduates to send more representatives to the Senate conceded. Further a Visitor has been super-imposed that goes to make the University more official-ridden than before. The Senate's autocratic power to remove from its register the name of any graduate "if he has been guilty of scandalous conduct" and to withdraw any degree or diploma conferred upon him remains unchanged. All modifications effected in the constitution of the various other bodies like the Syndicate, the Academic Council, etc., have one tendency, i.e., to conciliate the men of the mofussil and therefore in dealing with the third objection the rest of this subject will be considered.

VI

When the draft was first published in July last there was a cry raised from all quarters North and South, East and West that mofussil interests were in danger; that Madras will have the luxury of a Teaching Residential University at the cost of the mofussil institutions which, already famished, will hereafter be starved and completely neglected for the sake of this white-elephant at the metropolis. Magic fence of ten-mile radius and the new nomenclature of constituent and affiliated colleges, the latter being allowed to hang on to the University by sufferance, as it were, all these created a genuine alarm and protest-meetings were held in various places and memorials submitted to the Government by responsible officers and public men from the mofussil. No impartial critic will deny the success of all these agitations and we shall not be far wrong if we

* The Hindu Annual Supplement.

venture to suggest that they have succeeded more than they anticipated or hoped for.

A. The first and foremost point gained by the moffussil is wringing out an assurance from the Minister that the same courses and examinations will continue as heretofore both for Madras and moffussil colleges, a concession which Mr. C. R. Reddy has condemned pretty strongly as calculated to retain the evils of external tests which the University is intended to minimise. One of the main objects of the new Bill is to minimise the evils of examinations and to lay greater emphasis on teaching and how can this ideal be kept up if the same courses of studies and examinations be maintained both for the constituent colleges under the direct control of the University and for the affiliated colleges scattered throughout the Province though it is true that some of the University Professors of the metropolis will tour to these cultural centres and deliver lectures and some of the professors of the affiliated colleges may also be recognised as University Professors?

The Minister himself in his speech introducing the Bill expatiated upon the various concessions made to the moffussilites and showed how under the new Bill they have "a power which they do not possess under the existing system." Let us examine it in detail.

B. First in order comes the Senate. Moffussil representation was quite adequate even in the original draft as the majority of representatives of (a) Registered Graduates, (b) of the Legislative Council, (c) of the rich donors, and above all (d) of the 25 nominated candidates by the Chancellor, was bound to be from the moffussil. In the Bill now presented the Council of Affiliated Colleges has got the

right to send 5 representatives and if it be contended that this was merely to counter-balance the 5 given to the Academic Council there is no guarantee that the latter 5 will represent Madras and it is not impossible that all these 5 may also represent moffussil, as the Academic Council, as we shall see later, has quite an influential representation of the moffussil in its constitution. It is true that item (11) under class I—*Ex-officio* members, i.e., the Principals of First-grade affiliated colleges has been dropped in the new Bill; but it has been dropped, presumably, because the authorities saw that Principals of First-grade Colleges include the heads of affiliated colleges also, as in the definition of a First-grade college no distinction is made between an affiliated and a constituent college. Thus we see how the moffussil element is strengthened in the Senate.*

C. Secondly let us take the Syndicate. In this body of 16 members, over and above the two members to be elected by the Council of Affiliated Colleges contemplated by the original draft, the present Bill gives the Principals of Affiliated Colleges the right to send 2 of their representatives. This is over and above the chance they have of having their men in the

(a) Two members to be nominated by the Chancellor;

(b) Six members to be elected by the Senate;

(c) Two members to be elected by the Academic Council.

When we remember the fact that the Vice-Chancellor and the Director of Public

* The Select Committee has recommended two members in the Senate from each District "with a view to remove the apprehension that moffussil interests may not receive adequate attention."

Instruction, the two *ex-officio* members, are not likely to be violent anti-moffussilites and also the fact that the metropolitan institutions have not the right of sending their own representatives but have to take their chance along with the moffussilites in contesting the ten seats mentioned above, we see that the moffussilite need have no fear that he would be swamped out in the chief executive body of the University.

D. Thirdly let us see how the moffussil interest stands in the Academic Council which as contrasted with the Syndicate will be in charge of all academic matters. The only alteration introduced in the Bill is the dropping out of the Chairmen of the Boards of Studies and the three nominated members by the Chancellor. Teaching staffs of the constituent colleges are recognised for the first time as having an existence independent of their Principals and they are given 3 representatives. Even the ablest champion of the moffussil cause has not complained of inadequacy of representation; but has chosen to remark only upon the mistaken policy of introducing non-teaching element in this academic body and upon the fact that Principals are taken to be more 'academic' than Professors; for as he adds "the qualities required for the administrative headship of a college are not necessarily the same as those needed for membership of this Council."

E. Lastly we come to the Council of Affiliated Colleges. The institution as a whole is a concession, pure and simple, to the moffussilite. Under the new Bill it has got the additional power of making proposals "to the Syndicate or the Academic Council as the case may be to supplement the teaching provided by the affiliated colleges."

Thus in almost every respect the claims of the moffussilite have been strengthened and safeguarded. And there is absolutely no comparison at all between their position under existing conditions and their position as contemplated in the Bill. "Under the existing system," as the Minister says, "there is hardly any statutory claim for representations" in the various bodies connected with the University.

It may not be out of place in this connection if the question be asked whether there is any representation given to constituent colleges in the bodies affecting the affiliated colleges only. If the University be common to both these classes of institutions and if the moffussil interests are safeguarded in all common institutions what harm if a metropolitan representative or two be there in the Council of Affiliated Colleges if at least as a symbol of friendly relationship and to offer advice if needed?

VII

We come to the next objection and perhaps the most serious one, i.e., the question of finance. The Hon'ble the Minister has given figures to show that with the accumulated Imperial and Provincial grants we can make a beginning and he has estimated the annual recurring expenditure to be 3 lacs. This may perhaps be enough for the first year but will soon be found to be very insufficient. The Madras Teachers' Guild in one of its meetings held to discuss this subject resolved to support the underlying principle of the Bill subject to certain provisos and safeguards, the very first of which runs thus:—

"There should be a statutory provision for the contribution by Government of an annual recurring grant of 5 lacs of rupees to begin with, and gradually rising in the course

of 5 years to a minimum of 10 lacs for the Madras University (and also for increased grants to the moffussil colleges so as to enable some of them to develop into nuclei of future Universities)."

Where is this money to be found? Is it wise to start a University on this large scale without a statutory guarantee about its minimum financial requirements? If this amount can be found somehow or other, looked at from the higher point of view of national efficiency, is the new University the best object of expenditure? Are not the claims of Primary Education more urgent in this land of appalling illiteracy and ignorance? This point so pertinently raised by Mr. M. C. Rajah has not been satisfactorily answered. Mr. C. R. Reddy, than whom the country has not a stouter champion in all causes having a liberalising aim, in his speech which was more or less a reply to the previous critics evaded this point and merely said that there is no antagonism between higher education and Elementary Education and that it is those who have received the higher education, like the late Dr. T. M. Nair and the present Minister of Education, that have championed the cause of the illiterate and the oppressed. But that was not the point. The point is if extra money be available in any manner, which national demand has the prior claim upon the money, Elementary Education or University Education?

VIII

The residential aspect of the University deserves a moment's notice. All those who have had anything to do with hostels will bear witness to the fact that the 'hostel' is not the last word on the subject of the students' residential problem. It is at best a makeshift arrangement and modern expert

opinion agrees with the view of the veteran Dr. Miller who will on no account have more than 100 students in a hostel in which case it ceases to have a corporate life of its own and becomes a barrack. Further, shrewd observers and students of Indian society, like the talented editor of the *Indian Social Reformer* of Bombay are of opinion that hostels tend to deaden students' moral sensibilities and that hostel life is but a sorry substitute for healthy home life where the youth has plenty of opportunities for self-sacrifice and service—things which ultimately are of greater importance to the students' future life than a brilliant academic career. Lastly all orthodox parents (and they are many) put up with the hostel idea as an inevitable evil and note much to their regret that boys get curious notions of intolerant liberalism and militant progress untempered by real wisdom and experience.

IX

Thus the Bill is seen to be an improvement upon the old draft inasmuch as it breathes a spirit of compromise and has made substantial concession to the well-organised and vocal moffussil opinion; but some of the old objections, the bureaucratic nature of some academic bodies, the questionable necessity of the new departure, the non-recognition of bodies like the Tamil Sangam and Telugu Academy that are doing cultural work of a high order, the serious financial objection and the possible dangers ahead if the hostel system be allowed to develop without proper safeguards, all these remain.

X

The Select Committee has published its recommendations; but let us wait and see which of these are likely to be accepted by the Council when the Bill is again pre-

sented before it for its consideration. The creation of the Pro-Chancellor and the re-introduction of 'Regulations' to denote the resolutions of the Academic Council, increasing moffussil representation in the Senate, including the constitution of Academic Council in the law itself instead of allowing it to be settled by statutes of the Senate, the enlargement of the Syndicate corresponding to the larger Senate, slightly changing the constitution of the Council of Affiliated Colleges and increasing its powers, are some of the important changes introduced. The dropping of the Section requiring the assent of the Chancellor to statutes passed by the Senate, the appointment of the Vice-Chancellor by the Chancellor instead of ratification of the

election by the Senate from among the candidates nominated by the Syndicate, his pay alone being left to be decided by the Senate, and the Senate being asked to submit a report after 5 years on the condition of affiliated colleges and on the creation of new University centres, deserve special mention. The moffussilite is not yet satisfied as the able dissenting minutes show. The whole country is anxiously awaiting the fate of the Bill. Though its passing by the Council be assured the final shape it will assume cannot be predicted especially when we remember the non-partisan nature of the opposition.

S. K. YEGNANARAYANIER.

INTERMEDIATE EXAMINATION, 1923.

SELECT ESSAYS

FROM

ADDISON'S SPECTATOR

CHIEFLY THOSE RELATING TO SIR ROGER DE COVERLEY

EDITED WITH INTRODUCTION AND NOTES

BY

E. H. ELLIOT, B.A.

late of the Presidency College, Madras.

Price Re. 1-12-0. Charges extra.

Just Ready!

"AS YE SOW SO YE REAP"

Just Ready!!

"இட்டார் க்கு இட்டபலன்"

(IN TAMIL)

By

Miss J. PONNUSWAMI RAO,

Asst. Mistress, Govt. Training School for Mistresses, Conjeevaram

DEDICATED TO

Mrs. C. M. DRYSDALE,

First Deputy Directress of Public Instruction, Madras.

Price As. 10. Charges extra.

SRINIVASA VARADACHARI & CO., TRIPPLICANE, MADRAS.

The Educational Review.

A great honour has recently been done to the teaching profession by His Highness the Maharaja Saheb Bahadur of Vizianagram, who was pleased to appoint, on his accession to the *Gaddi*, Principal Y. Narasimham Pantulu as the Dewan of the Vizianagram Samasthanam. The Dewan is the leading educationist of the Andhra Desa and one of the most lovable of men. We have had the inestimable privilege of moving with him somewhat closely and hope that this short sketch will be a source of inspiration to young men engaged in the noble profession of teaching.

Born at Vizagapatam, Mr. Narasimham received his early education in the London Mission High School of the locality. A prizeman in every class, he soon attracted the attention of his Christian masters and it is said that close contact with the Bible and the Missionaries had evoked in the mind of young Narasimham some sort of a spiritual storm. Fortunately for the Hindu community, he had withstood the temptations. Matriculating in the year 1883, he proceeded to Madras for the prosecution of his studies. He joined the Madras Christian College and soon won the love and admiration of his masters by his indefatigable industry and exemplary character. Passing in due course the F.A. and B.A. examinations securing a very high rank

in each of them, Mr. Narasimham returned from Madras in 1888 and joined the staff of the Maharaja's College, Vizianagram, as Science Teacher in the High School department. He was not, however, to remain long in this position and circumstances soon tended to shape his career. The Chemistry chair of the Maharaja's College fell vacant owing to the resignation of Mr. K. Vijiaraghavachariar, M.A., who joined the Government Revenue Department. Sir Anandha Gajapaty Raz Maharaj, that enlightened scholar and aristocrat, noted for his patronage of learning and culture, did not want to close the Chemistry Section of the College and with a view to appoint Mr. Narasimham as Professor of Chemistry sent him to the Calcutta Presidency College for the prosecution of his studies there. The Maharaja's protégé soon fulfilled the expectations formed of him. He not only stood first among the first class men who passed the M.A. Degree examination but also obtained the Gold Medal of the Calcutta University for Chemistry. When in 1895 the Chemistry Section of the Maharaja's College was re-opened, Mr. Narasimham was at once appointed as the Chief Professor of the Chemistry Department. In the early days of his career as Professor of Chemistry, he had not a little difficulty in maintaining the efficiency of his department. What with the poor allotment of funds and lack of sympathy and encouragement on the part of those then directly responsible for the management of the institu-

tion, Mr. Narasimham's task had been an arduous one. But, when better days dawned, especially during the last quinquennium, he lost no time in expanding and improving the laboratory on up-to-date lines—and what is more in organizing work—so that, to-day, the Chemistry Department of the College is an object of admiration to the many eminent scientists who have visited it.

On the retirement of Dewan Bahadur K. Ramanujachariar, M.A., B.L., Mr. Narasimham was appointed Principal of the College in 1919. It was then that the Non-Co-operation movement was in full swing and the political agitators were trying to subvert the educational institutions. Mr. Narasimham, by his tact and statesmanship successfully stemmed the tide of Non-Co-operation and steered clear of all difficulties, to the surprise and chagrin of mischief-mongers. As Principal, he was responsible for the introduction of a new policy in the administration of the College and under his direct control and able guidance, the College branched off into various activities. Encouraging every member of the College staff with a view to bring out his latent powers, he converted the College into a Research institute. Research work is now being carried on in the College in almost every department,—Science, History and Literature—and members of the College staff are allowed to publish the results of their investigations in the College magazine, the starting of which is entirely due to his zeal for research work. In his dealings with the staff,

Mr. Narasimham was exceedingly courteous and endeared himself to all. Never once has he been known to have used any harsh expression towards his subordinates and colleagues. A man of genial temper and suave manners, Mr. Narasimham though high-placed, has not the *hauteur* of some at whose frowns subordinates quail. As a Fellow of the University of Madras, Member of the Board of Studies and Chairman of the Board of Examiners, he represented the best interests of students and discharged his duties faithfully and efficiently. As Principal, he had always upheld the dignity and status of mofussil institutions. He has now left the College at a time when great educational schemes are in the air but he is destined, by virtue both of his past career and his present exalted position as Dewan of the premier Zamindary in the Presidency, to take a leading part in shaping the educational policy of the Andhra Desa.

Mr. Narasimham's activities are not confined to the four walls of the College. He is the leading citizen of Vizianagram and one of the foremost in the Andhra country. He is a public worker in every sense of the term. He was Chairman of the Vizianagram Municipal Council from 1902—1906. As Chairman, his administration was characterised by great improvements in every branch, Sanitation, Drainage and Conservancy. The Government had occasion to remark that Mr. Narasimham has discharged his duties much to his credit. He is the soul of many co-operative enterprises in the Vizaga-

patam District. He had organised many Cattle-shows. He has done much to promote a healthy social life in Vizianagaram. He was the founder of the local City Club and ran the institution for four years as Secretary. He is now its President.

Mr. Narasimham Pantulu has now entered a new sphere of activity. As Dewan to one of the most enlightened of aristocrats, he is confidently expected to have received instructions to act, in the next few days, in such a manner as to enable the Andhras to realise their long-cherished hopes and ideals in the matter of the Andhra University.

May God grant him long life and prosperity!

The recent report of the Royal Commission on Oxford and Cambridge Universities issued by His Majesty's Stationery Office in England is a document

which deserves the close study of educationists all over India. Apart from its bearing on the present problems of Oxford and Cambridge, it raises many questions of permanent interest as will be evident to even casual readers of the book. In addition to the passages to which we have already made reference in some of the earlier issues, we should like to invite attention to others which contain ideas which ought to find embodiment in the organisation of Indian Universities, quite as much as in the institutions of Oxford and Cambridge. In the starting of new unitary and residential Universities which is now going

on in India, there is the danger of the individuality of college-life being submerged under the wider aspects of University existence. Some of the remarks of the Commissioners on the advantages of collegiate life are therefore worth bearing in mind. "The college system has succeeded not only in maintaining discipline and encouraging good conduct among the students, as the original founders designed, but it has for generation after generation facilitated the intimacy and intellectual friendship of students of all classes, types and studies; it prevents the segregation of those engaged on a particular subject and the consequent narrowing of outlook and sympathies; it has thrown together teachers of the most diverse subjects in close intellectual intercourse; and of recent years it has produced an ever-increasing intimacy of teachers and taught, often under ideal conditions. The college system enables the teachers to become familiar with the qualities and needs of individual students to a degree that would not be possible under a system based wholly on University organisation. The sense of history and tradition in perfect harmony with the sense of progress and free intellectual activity seems enshrined in the quadrangles, courts and cloisters of not a few of these ancient colleges and inspires much of the sentiment attaching to life at Oxford and Cambridge.

Last, and not least, the college system offers, in our view, a valuable means of educational experiment and progress which would be much reduced if the University were the one and only organ of teaching and the only body for choos-

ing Scholars and Fellows. The colleges afford a number of centres of educational initiative in matters of learning, instruction and the welfare of under-graduates. Not infrequently some particular college has afforded shelter to minority opinions or unusual modes of thought which would not have been welcome to the University as a whole. And although some colleges from time to time are below, others from time to time are above, the average level of academic opinion. At both Oxford and Cambridge, individual colleges, great and small, have again and again led the way in social and educational progress. It is the duty of the University to insist that in certain respects no college fall below a minimum standard, but it has often itself followed the lead of colleges which were for the time in advance of the general average."

The recommendations made for the improvement of the Universities are of great value. It is significant that the report should place in the fore-front the need for improving the prospects of the staff in the two Universities. "It is not indeed possible or desirable," write the Commissioners, "for the Universities to compete pound for pound with offers of this description. But a living wage is necessary. People are ready to sacrifice higher salaries and even posts of greater power and influence in order to enjoy the amenities and the intellectual privileges and ideals of life at Oxford and Cambridge. But however anxious they may be to stay, few can do so except on terms enabling them to provide for a family and educating their children. If this could be done before the war on an income of £500 or £600 a year in

middle and later life, it cannot be done to-day. Each University must be placed in a position to offer to all those who do its work a salary and pension prospects enabling a man to marry and bring up a family, with amenities and advantages of education like those of other professional families. On that condition Oxford and Cambridge will be able in the coming era to keep enough of their best students to do their teaching and research—but not otherwise." There are a number of other passages which will amply repay perusal and we hope the members of the teaching profession in India will benefit by the wisdom enshrined in the pages of the report.

A danger against which school-masters must guard themselves,

Too much Home Work. especially in the lower stages of instruction is the tendency to give too much home work to the pupils. It is a temptation which a teacher is sometimes not able to resist. It is an easy way of insuring that pupils do some work at home and the teacher probably has a feeling that it saves him much of his own trouble. In the case of girls in adolescence the danger is particularly serious. Sir George Newman, Chief Medical Officer of the Board of Education in England, has recently drawn special attention to the evil. He points out that girls in Secondary Schools are growing rapidly and at their age are very liable to defects of growth. Their conditions are much affected by over-pressure and mental strain. "There is no doubt," says Sir George, "that home-work and preparation for examinations tell very hardly

upon many girls who are found in a neurotic condition and in a depressed state of health." Sir George Newman reports that 35 per cent. of the children coming to school at the age of five years bring with them physical defects and seeds of disease which give them a very bad start in their school-life. In India, we imagine the percentage should even be higher and the matter deserves even more serious attention.

There are many commendable features in the programme of Educational Reconstruction which the Trichinopoly Teachers' Guild has recently prepared for the benefit of the public. It is suggested that the educational life in the country must be moulded to the natural advantages we possess. Instead of in costly buildings of a set pattern, teaching is desired in the open or in the shade of the village tree or in thatched cottages or in the village *chavadi*, temple, mosque or church. There is a protest against "over-dress" which is against the climate of the country, which is prohibitively costly, which hinders alertness and fatigues teachers and the taught. Demand for instruction through the medium of the vernacular and for the teaching of Hindusthani to every pupil comes next. In the treatment of preliminary features, the following words deserve special attention: "The provision of an inspiring atmosphere of creative activity. This implies perfect freedom for the teacher and the taught. It implies a deliberate fostering of the creative motive in the schools, the giving of a practical turn to instruction in

schools." The Guild wants the assimilation of healthy tendencies in the culture of other nations with India's own culture. It rightly protests against public examinations at the end of either Primary or the Secondary School course. As the Guild observes in conclusion, "the substance of national education must primarily consist of India's own life and secondarily of the life and activities of the world in general."

The Select Committee of the Madras Legislative Council seems to have succeeded in making the Madras University Bill worse.

Under the guise of ensuring representation of the mofussil, the Committee recommends the election to the Senate of two members from each of the Districts of the Presidency, the electorates being the Municipalities and the Local Boards! This is democratising with a vengeance and it is not difficult to realise how academic the Senate will be with this dilution of representatives of Municipalities and District Boards! These bodies being packed with obedient camp-followers of the political party in power, the Senate will only be a replica of the present Legislative Council where Ministers are perpetrating the most reactionary measures backed up by communal support," tyrannising over a minority with a noble record of work in the past. The Select Committee was apparently in a mood to oblige the Minister as much as possible and has recommended in its wisdom that the Minister should be the *ex-officio* Pro-Chancellor of the University. We are

not surprised at the large number of dissenting minutes which have been written and we hope that the sound opinions expressed by Dewan Bahadur R. Venkataratnam Naidu and Dewan Bahadur M. Ramachandra Row will receive the consideration due to them when the measure is taken up for final consideration, though we are not hopeful of the present Madras Council doing anything worthy of the great traditions of the Madras Presidency in educational matters.

It is interesting to note that greater effort is being concentrated in Bombay on Elementary Education than in many other Presidencies in India. In 1920-21 she spent no less than Rs. 77 lakhs on Primary Education while all the other provinces put together—and four of them have each a population more than double that of hers—spent only Rs. 134 lakhs. Fifty-two per cent. of her entire educational expenditure is devoted to Primary Education while in Madras and in U. P. which come next in order, the percentage is only 36 and 24 respectively. It was the first Presidency in India to introduce some time ago the principle of compulsion as a permissive measure. It is now contemplating a further advance in the direction and we hope it will meet with the success which it deserves and also serve as an example to other Presidencies in India.

We are glad that another Mathematical Prodigy has been revealed in the Presidency of Madras. Rajnarain, a Brahmin boy of Madura, has been displaying remarkable powers in Mathematics and we are glad that his genius has already attracted attention in the proper quarters. We hope that there will not be any delay in offering him the necessary facilities for the development of his mathematical genius, as there was in the case of the late lamented Mr. Ramanujam. The Hon. Mr. Justice Ramesam, himself a Mathematician of no mean ability, seems to have convinced himself of his wonderful powers. We hope that he will soon come into the fulfilment of his promise shedding lustre not only on the Presidency which gave him birth but on the entire mathematical world.

Some important business was transacted at the last meeting of the Senate of the Madras University held

early this month. We are not surprised that the Senate declined to bestow any further consideration on the draft of the Madras University Bill, the measure having already been introduced into the Council by the Minister in spite of all protests. The Hon. Mr. Justice Coutts-Trotter was right in saying that the Senate would preserve its dignity best by leaving the University Bill well alone. Mr. Natesan also rightly maintained that it was due to the self-

respect of the house that they should have nothing to do with the Bill which had not been referred to them again, and a solemn and silent vote would be sufficient indication of the depth of the indignation the Senate felt at the way it had been treated. Mr. Satyamurti moved: "That the Senate do place on record its regret that the Honourable the Minister of Education persist in proceeding with the University Reform Bill in spite of the adverse vote of the Senate and without further reference of the amended Bill to the Senate for its adoption." Always jealous in guarding the liberties of the Senate, Mr. Satyamurti did a piece of real service in moving the resolution, and though he did not press it to a division, it was clear that the resolution had a large measure of support from members of the house. We are however afraid that this well-deserved rebuke is not going to have any effect on the Ministry of the Madras Government, callously indifferent as it is to all the larger considerations of patriotism and to the ideals of higher Education. What has happened to the Bill since then is only a confirmation of this opinion of ours. The Senate also placed on record its sense of the deep loss sustained by the University by the deaths of the Rev. Zumbro and Mr. B. Hanumanta Rao. We are glad that the Madras University has had the privilege of receiving a sum of £3,000, as a legacy in accordance with the will of the late Sir William Meyer, G. S. I. E., K. C. S. I., for promoting the study of History and Economics in the

University. The late Sir William Meyer was one of the most distinguished European Civilians the Madras Presidency has had, and we are glad that his name will be perpetuated by an endowment of this kind. In view of the dismal failure of the drainage scheme in Madras which has already absorbed lakhs and lakhs of rupees of the rate-payers' money without compensating advantages, we are not very much enamoured of the idea which seems to have found acceptance with the Senate, of getting the Chief Engineer in charge to lecture on the subject to the Engineering students of the University. Finance continues to be one of the serious problems in connection with the Indian Universities to-day and we are not surprised that the Madras University should have found it necessary to raise the examination fees. With no rich endowments and with no liberal grants from the Government the majority of the Universities in India unfortunately depend on examination fees and that is a position not calculated to advance the highest interests of education. We are glad the University has at last made due provision for the degrees of Doctor of Philosophy and Doctor of Science in the University. The *alumni* will now have the privilege of obtaining recognition for their intellectual achievements even after the stage of Master of Arts. Mr. Satyamurthi was responsible for the passing of two other resolutions which will be welcomed by the entire student-world which has always had a

powerful supporter in him. One of them provides for the holding of the B. S. Sc. examination twice in the year as is the case at present with other degree-examinations in the University. Another will have the effect of nationalising the studies to some extent, because it provides for the inclusion of Indian History for the Intermediate course and for the recognition of Hindi as one of the Indian languages for examinations in the Universities. The Senate has been somewhat responsive to claims for the encouragement of research in recent times, and we are glad that at the last meeting it sanctioned a scholarship of £150 per annum to Mr. R. V. Swami, B.A. (Hons.), sometime research student of the University, to prosecute more advanced research in Mathematics at the University of Edinburgh.

In view of the adverse criticisms which have appeared in recent months on the evils of the Public School system in England, the following defence by the *Westminster Gazette* will be read with interest:

"Parents are worrying about the rules and regulations, some of them incomprehensible to the uninitiated, with which the custom of their boy's school demands compliance. Many of them are worrying also about the cost of it all. Some of them are sad at parting with their children; others, perhaps are a shade relieved, for the summer vacation is long and strenuous, and are looking forward to a week or two of real holiday for themselves. But there is one thing which few of them seem to worry about, and that is whether the system of sending children away from home for

nine months of the year is a wise one or not. It has become a tradition of English middle-class life, and as such is scarcely questioned.

"On the whole the boarding school system has justified itself. Its conspicuous failures are few, its conspicuous successes are many. The general effect of public-school life on the normal boy is good. He learns at an early age that the world is a big place and that he is by no means the centre of it, yet that it has its prizes and that they are his if he has the capacity and the determination to win them. He learns how to behave in the midst of a highly critical crowd, and how to adjust himself to difficult circumstances. He is made to realise, moreover, what it means to be a member of a community which grants him great opportunities but expects and deserves loyal service in return.

"The result of this system is to provide us with a type of young man well schooled in some ways if a little primitive in others. He has lacked the society of women, especially of his own age, during important years of his life, and has lost considerably in consequence. But he has acquired genuine qualities which he could scarcely have acquired at home or in a co-educational establishment. He has a code of behaviour which, although a little lopsided and ingenuous, is very rigid and in many respects unselfish. He stands on his own feet and is not afraid of making up his own mind."

"The Government are glad to note the testimony to the good work done by Mr. D. A. Hobday (Secretary), M. R. Ry. Rao Sahib R. Krishna Rao Bhonsle (Assistant Secretary) and by the other members of the staff of the Commissioner's office"—thus it is stated in the Government order reviewing the annual report submitted by Mr. R. Littlehales on the examinations that were conducted by him as Commissioner

for Government Examinations during the year 1921-22. The "good work" referred to was in connection with thirteen examinations, the total number of candidates for them having been about 36,800 held at 500 centres (total). One of these examinations was the Indian (Imperial) Police Service Competitive Examination, and it is "gratifying" to note that the Chairman of the Central Advisory Board of Education, Delhi, conveyed to Mr. Hobday his appreciation of the "evident care and skill" with which the examination was conducted. The largest number of candidates (about 12,700) that registered their names was for the Secondary School-Leaving Certificate Examination; and the S. S. L. C. Board placed on record its "appreciation" of the "great ability" with which the staff of the office did their "responsible" work and stated that the "thoroughness and promptitude" with which "the great amount of work" was done "reflected the highest credit" on the entire staff. We offer our congratu-

tulation to the staff on the deserved encomiums showered on them by responsible authorities. The Government Technical Examinations (about 12,000 candidates) were held also in the Native States of Hyderabad, Mysore, Travancore, Cochin and Pudukkottai. One of the interesting features of the report is that it contains particulars relating to the examination for the award of certificates of competency to persons qualified to teach in schools for deaf-mute children; there were thirteen candidates: three at Madras, four at Madura and six at Palamcottah; two at each centre were women; all of them belonged to the respective local schools. The examination is conducted by Boards of Examiners, one of the two members of each Board being the Inspector or Inspectress of Schools (for women candidates) and the other, a specialist in this form of education who is a member of the college of teachers of the Deaf and Dumb, London, or who possesses similar qualifications. Nine of the candidates qualified for certificates.

DEDUCTIVE LOGIC

For Intermediate Students of the Indian Universities

BY

G. SATYANARAYANA MURTI, M.A.,
now Professor of History and Economics,
Noble College, Masulipatam.

Price Two Rupees. Packing and Postage extra.

Copies can be had of

Prof. G. SATYANARAYANA MURTI, M.A.,

Noble College, Masulipatam

or

Messrs. SRINIVASA VARADACHARI & CO.,

Mount Road, Madras.

A BOOK OF VERSE

Compiled primarily for Indian Boys and Girls

BY

SIR HENRY NEWBOLT, B.A., D.LITT.,

Chairman of the Committee on the Teaching of English in England.

Price, Re. 1.

"This is an anthology of exceptional merit, one that could be made only by a good poet and a poet of faultless discrimination.....Many well-worn poems are found in the anthology, but what is more distinctive, numerous living poets have been drawn upon and quite the most interesting section is perhaps the work of Sir Henry Newbolt himself.....Of living poets ten little pieces from Walter de la Mare are quite perfect gems..... Altogether we have here an excellent up-to-date anthology of poetry worthy of universal use and appreciation"—*The Educational Review, Madras.*

THE LOTUS-BOOK OF ENGLISH VERSE

BY

P. C. WREN, M.A., I.E.S.

Seventh Edition.

Price, Re. 1-2.

A book of poetical selections unique in several respects, and better adapted for Indian school boys than any other school-anthology.

K. & J. COOPER, Publishers, BOMBAY.

UNIVERSITY OF MADRAS.

Intermediate Examination, 1923. RS. A. P.

GRAY—ELEGY AND OTHER POEMS, with Introduction and Notes, by E. E. Kellelt, M.A.	0 12 0
*TENNYSON—MORTE D'ARTHUR, with Introduction and Notes, by E. H. Elliot, B.A.	0 12 0
—ODE ON THE DEATH OF THE DUKE OF WELLINGTON, with Introduction and Notes, by E. H. Elliot, B.A.	0 8 0
MATTHEW ARNOLD—RUGBY CHAPEL AND THE FORSAKEN MERMAN, with Introduction and Notes, by E. H. Elliot, B.A.	0 8 0
ADDISON—SELECTIONS FROM THE SPECTATOR, with Introduction and Notes, by E. H. Elliot, B.A. (Coverley Papers, &c.)	1 12 0
* Both the books together Rs. 1.	

Shakespeare—Richard II. with Intr. and Notes, by Prof. J. C. Rollo, M.A. Mysore University. —In the Press.

Intermediate Examination, 1924.

MILTON—L'ALLEGRO AND IL FENSEROSO, with Introduction and Notes, by A. J. Grieve, B.A.	0 10 0
WORDSWORTH—SELECTIONS CONTAINING RESOLUTION AND INDEPENDENCE, AND OTHER POEMS, with Introduction and Notes, by E. H. Elliot, B.A.	0 12 0
TENNYSON—SELECTIONS containing MORTE D'ARTHUR, OENONE, ULLYSES, AND SIR GALAHAD, with Introduction and Notes, by E. H. Elliot, B.A.	0 14 0
TENNYSON—LOTOS-EATERS, with Introduction and Notes, by E. H. Elliot, B.A.	0 4 0
—POEMS, containing MORTE D'ARTHUR and ODE ON THE DEATH OF THE DUKE OF WELLINGTON, OENONE, ULLYSES, THE LOTOS-EATERS AND SIR GALAHAD. Red Letter Library. Cloth bound. Reduced to	0 12 0

B.A. Degree Examination, 1923

MILTON—COMUS, with Introduction and Notes, by Dr. S. Sathianadhan, M.A. 2nd edition	0 12 0
CARLYLE—HERO AS MAN OF LETTERS, with Introduction and Notes, by E. E. Kellelt, M.A.	0 12 0
SPENSER—PROTHALAMION, with Introduction and Notes by E. H. Elliot, B.A.	0 10 0
LESLIE STEPHEN—JOHNSON, English Men of Letters Series. Paper cover	0 9 0
—Cloth	0 13 0
CARLYLE—HERO AS POET, with Introduction and Notes, by the Rev. S. Gnana-muthu, M.A.	0 8 0

B.A. Degree Examination, 1924.

SPENSER—PROTHALAMION, with Introduction and Notes, by E. H. Elliot, B.A.	0 10 0
MILTON—COMUS, with Introduction and Notes, by Dr. S. Sathianadhan, M.A. 2nd edition	0 12 0
POPE—RAPE OF THE LOCK, with Introduction and Notes, by E. E. Kellelt, M.A.	1 0 0

BROWNING—SAUL, with Introduction and Notes, by C. H. Payne, B.A.

*WORDSWORTH—SELECTIONS, containing On Revisiting the Wye above Tintern Abbey, Ode to Duty and other poems, with Introduction and Notes, by E. H. Elliot, B.A.

*WORDSWORTH—SELECTIONS, containing ODE ON INTIMATIONS OF IMMORTALITY, and another poem, with Introduction and Notes, by E. H. Elliot, B.A.

CARLYLE—HERO AS MAN OF LETTERS, with Introduction and Notes, by E. E. Kellelt, M.A.

* Both together Rs. 1-4-0.

Other Intermediate and B.A. Books.

INTERMEDIATE GEOMETRY (Theory and Practice) by M. Satyanarayana, M.A., L.T., and K. S. Patrachariar, M.A., L.T. 2nd and Revised Edition

THE STUDENT'S COMPANION TO GEOMETRY, for the Intermediate Examination of the University of Madras, under the New Regulations, by K. Deva Rao, B.A., L.T.

EXAMPLES ON TRIGONOMETRY, containing the F.A. Trigonometry Papers for 15 years, 1888 to 1902, with Solutions of all the Problems, by P. A. Subramania Aiyar, B.A., L.T.

EXAMPLES ON ALGEBRA, containing F.A. Algebra Papers for 17 years, 1889 to 1905, by the same author

INTERMEDIATE CHEMISTRY, by B. Lakshmi Narasu, B.A., Professor of Physical Science, Pachaiyappa's College, Madras.

INTERMEDIATE PHYSICS, by the same author.

LECTURES IN LOGIC, by Rao Bahadur S. Mangesh Rao, B.A.

STUDENT'S HAND-BOOK OF PSYCHOLOGY, by the late Dr. S. Sathianadhan, M.A., LL.D. (2nd Edition)

QUESTIONS AND ANSWERS ON ELEMENTARY LOGIC, by M. Macmillan, M.A.

THE ELEMENTS OF HUMAN PHYSIOLOGY, by G. S. Ramasami Aiyar, B.A.

B.A. EXAMINATION ENGLISH LANGUAGE, LITERATURE AND COMPOSITION PAPERS OF 1881 to 1906 (both inclusive)

F.A. MATHEMATICS—ALGEBRA AND TRIGONOMETRY PAPERS, with Solutions and Notes from 1901-1903, by B. Hanumantha Rao, B.A.

MINTO'S LOGIC—INDUCTIVE AND DEDUCTIVE, 5th Impression, Rs. 3-6-0. Reduced to

ROBINSON—SHORT HISTORY OF ROME—Rs. 2-10-0. Shop soiled, reduced to

FAWCETT—MANUAL OF POLITICAL ECONOMY, Rs. 9-0-0. Reduced to

INDEX TO ARTICLES.

A.		PAGE			PAGE
Andhra University—A Memorandum	...	10	Elementary and Humane Education to the Young Wage-Earner in America	...	655
Andhra University—Medium of Instruction	...	115	Elementary Mathematics Association, Proceedings of the	...	217
Andhra University—Replies to Questionnaire of the Committee	...	124	Elementary Teachers' Conference, Trichinopoly	...	187
Andhra University, A Memorandum on the	...	407	English Education in Madras, The Beginnings of	...	706
Andhra University—Intermediate and Secondary Education	...	455	English History in the Intermediate Classes	...	729
Andhra University—The Centre and its Educational Needs	...	571	English in the Lower Classes, The Teaching of	...	741
Andhra University—Policy, Organisation, and Administration	...	724	Euclid vs. Non-Euclid	...	29
Andhra University Conference—Opening Speech	...	800	Examinations, A Memorandum on	...	783
Animals, What they owe to Plants	...	465	Excursion to Kolar Gold Fields, An	...	408
Arithmetic, The Teaching of	...	809	Experimental Psychology and Education	...	718
Atom, Present Conception of the	...	24	F.		
B.			Folk High Schools of Denmark, The	...	423
Bombay Compulsory Education Bill—Text.	...	676	G.		
C.			Geography among our School Subjects, The Place of	...	144
Calcutta University, H. R. H. The Prince of Wales at the	...	1	Geography in our Schools, The Role of	...	129
Civics, The Teaching of	...	601	Graphs in Elementary Mathematics, Use of	...	195
Co-Education—Critical	...	647	H.		
D.			Headmasters' Conference at Trichur	...	459
Discipline: Standards and Methods	...	714	Health and Happiness	...	206
E.			History (B. Group) in our Schools, A Plea for	...	47
Educational Conference, The Fourteenth Madras Provincial:	...		History (B. Group) in our Schools, A Plea for Modification of	...	369
Welcome Address	...	327	History, The Aim of	...	806
Presidential Address	...	337	Historical Research and Composition, Methods of	...	296
Resolutions Passed	...	382	I.		
Educational Ideals in Germany	...	65	Ideals of Education	...	504
Educational Ideal, The	...	131	Impressions of Oxford	...	461
Educational Ideal and System, The	...	528	Indian Education, The Historic Basis of	...	30
Educational Institutions in Burma	...	606	Indian Educational Policy, The	...	134
Educational Policy and the Reformed Government	...	732	Indian Historical Research and its Implications	...	563
Einstein's Aberration Experiment	...	279			

PAGE	PAGE
Indian Science Congress, Madras, The Ninth: • Presidential Address ... 159	S. School Discipline as a Factor in the Training of Character ... 596
Indian Science Congress, The Ninth— Chemistry Section—A Summary of Proceedings ... 282	Science and Education ... 671
Indian Schools ... 681	Secondary Education Council for each Dis- trict, A ... 201
Indian Students of Engineering, A Note of Advice to ... 464	Secondary Education ... 361
L. Literature—Old and New ... 519	Secondary Education, The Remodelling of, in view of Modern Life ... 516
M. Magic Square, On the Filling in of a ... 228	Shaw, George Bernard, on Shakespeare ... 415
Malcolm, Sir John, The Life and Works of ... 579	Sunshine Pictures ... 113
Mathematics—Definite Relations ... 217	Sunshine Pictures—A Rejoinder ... 310
Memorising ... 214	Supervision—What It is and what it ought to be ... 664
Memory or Reason ... 590	Supervision—What it is and what it ought to be ... 804
Message of the Bholpur School ... 514	T. Tamil Lexicon of the University of Madras. 236
Miscellanea Mathematica ... 228	Teaching of Elementary Mathematics in our Secondary Schools, The ... 291
Multiplication, Russian ... 230	Teaching of Geography, A Plea for better attention to the ... 354
Mysore S. S. L. C. Scheme—A Suggestion. 366	Teacher, The Ideal ... 39
N. Nature Study, More Lessons in ... 302	Teachers' Union for the Andhra Districts, A ... 45
Negro Educationist of Repute, A ... 752	Teachers' Training Colleges—The Forbidden Fruit ... 372
Non-Euclidean Geometry and the Concept of Space ... 285	Teachers' Conference, The Second South Arcot: Presidential Address ... 449
Note, A ... 316	Resolutions passed ... 467
O. Oosmanla University, The ... 107	Teachers' Guild, The South Arcot District: Proceedings ... 687
Oriental Conference, The Second ... 177	Teacher, The—A Poem ... 702
P. Perpetual Calendar ... 28	Time Element in School Life ... 587
Primary Education, The Aim of ... 456	Training Schools, Reorganisation of ... 815
Psychology in the London Schools ... 314	U. University of Allahabad—Convocation Address ... 58, 779
Psychology—The Teacher and the Child ... 510	University of Bombay and the Bombay City, Committee on the Collaboration between ... 374
R. Reform Bill, A Short Note on the ... 585	University of Calcutta, H. R. H. The Prince of Wales at the ... 1
Relativity, Theory of ... 87	University of Calcutta—Convocation Address of H. E. Lord Ronaldshay ... 261
Religious Instruction in Schools ... 215	
Responsibilities of a Teacher and the Obstacles in the Way ... 667	
Retrenchment in Education ... 312	
Rural Education in South India, Some Aspects of ... 147	

PAGE	PAGE
University of Calcutta—Address of the Hon. Justice Sir Asutosh Mookerjee, Kt., C.S.I. 264	University of Madras—Reform Bill—Report of the Select Committee with Minutes of Dissent ... 828
University of Calcutta—Speech of Dr. Hira- lal Halder at the Meeting of the Senate. 532	University of Mysore—Convocation Address. 625
University of Calcutta—Report of the Regis- tration Fee Committee of the Senate ... 754	University of Nalanda ... 351
University of Lucknow—Convocation Ad- dress ... 697	University of the Punjab—Convocation Ad- dress ... 50
University of Madras, English Lectures. 5, 101, 397	Universities of To-morrow ... 62
University of Madras, Science Lectures ... 99	V. Vocational Education—Some Suggestions. 34
University of Madras, Senate Meeting. 239, 534, 818	Vocational Education—Practical Experi- ments of the Madras Presidency ... 232
University of Madras—Reform Proposals. Text of Draft Bill ... 480	Vocational Training, A Plea for ... 523
University of Madras—Reform Bill: Comments and Criticism ... 495	W. Waste Not, Vex Not ... 434
University of Madras—Convocation Address. 499	World's Monetary Problems, The ... 420
University of Madras—Reform Bill—A Criti- cism ... 634, 703, 844	Z. Zodiacal Signs—The Use of the Globes ... 231

PAGE	PAGE
A. American Bill of Education, The Great ... 761	I. International Moral Education Congress ... 544
Adequate Conception of Education for Modern India ... 437	O. Oxford and Cambridge Universities Bill, The ... 763
C. Child's Views on Education, A ... 764	P. Progress of Education in the Bombay Presi- dency, The ... 762
College Life in the Universities ... 549	S. Secondary Education: Some Suggestions ... 550
Continuation Schools in Norway ... 542	Standardised Educational Tests ... 760
D. Delhi University, The ... 763	Supplementary Aids to Class Work in Mathematics ... 545
Educational Settlements ... 435	Supply of College Men ... 544
Education in France since the War ... 541	T. Teaching of Natural History in Schools, The. 435
G. Geddes Committee and Education, The ... 548	V. Vagaries of Marking ... 763
H. Headmasters and Assistants ... 438	
Higher Education in Egypt ... 547	

INDEX TO BOOKS REVIEWED.

	PAGE		PAGE
A.		K.	
Anantapadmanabha Rao, M. C. S., The Planning and Fitting up of a School Laboratory ...	440	Keluskar, K. A., N. S. Takakhav and, Life of Shivaji Maharaj ...	61
Atmaram Sastri Odlamane, A Note on the Direct Method of Teaching Languages. ...	551	Krishnamachari, B., New Indian Algebra, Vol. II ...	609
B.		M.	
Barlow, Glyn, The Story of Madras ...	317	Mackinder, Sir H., The Nations of the Modern World ...	316
Brown, R. N. R., O. J. R. Howarth and J. McFarlane, The Scope of School Geography ...	766	Macmillan & Co.: Six Coloured Pictures illustrative of Alice in Wonderland ...	150
C.		Macmillan & Co., Physiology and Hygiene Reader ...	469
Canton, W., The Story of St. Elizabeth of Hungary ...	611	MacMunn, N. E., and Geraldine Coster, Europe: A Regional Geography ...	766
Cather, Katherine Dunlop, Boyhood Stories of Master-Painters and Musicians ...	553	Mahaluxmivala, C.D., A Note on the Education of Parsee Children ...	468
Coomaraswami Naidu & Sons—Kamba Ramayanam—Ayodyakandam ...	440	Marriott, J.W., A Year's Work in English ...	72
Coster, Geraldine, N. E. MacMunn and, Europe: A Regional Geography ...	766	McFarlane, J., R. N. R. Brown, O. J. R. Howarth and, The Scope of School Geography ...	766
D.		Morgan, R. B., Readings in English Social History from Contemporary Sources, Vol. IV ...	611
Douglas, Barbara, Favourite French Fairy Tales ...	685	Mowat, R. B., A New History of Great Britain ...	768
Duncan, J., Introduction to Engineering Drawing ...	319	N.	
G.		Natarajan, V., A Geography for Middle Schools, Book I ...	317
Goode, A. M., A Child's Nursery Rhyme Reader ...	441	Natesan & Co., G. A., Eminent Orientalists, Indian, European and American ...	610
Gordon, Corrie, Teaching in Indian Elementary Schools ...	150	Newbolt, Sir Henry, A Book of Verse chosen for Students at Home and Abroad ...	551
Griffin, F. L., An Introduction to Mathematical Analysis ...	469	Nicoll, Allardyce, William Blake and his Poetry ...	553
H.		P.	
Henderson, B. L. K., and F. G. Russell, Readings from the Bible ...	553	Palmer, Harold E., The Oral Method of Teaching Languages ...	150
Holmes, Edmond, Give Me the Young ...	150	Palmer, Harold E., English Intonation with Systematic Exercises ...	553
Howarth, O. J. R., R. N. R. Brown, J. McFarlane and, The Scope of School Geography ...	766	Philip & Son, Explanatory Handbook to Comparative Wall Atlas of Commercial Development ...	388
Howarth, O. J. R., The World about Us—A Study in Geographical Environment ...	767	Philip & Son, New School Atlas of Comparative Geography ...	388
J.		Polkinghorne, R.K. and M.I.R., The World Outside ...	553
Johnston's Commercial and Library Chart of the World ...	316	Pritchard, F. H., Training in Literary Appreciation ...	441
K.		R.	
Kellow, H. A., A Practical Training in ...		Ramasami Iyer, C. S., Child's History of ...	844

INDEX TO EDITORIALS.

	PAGE		PAGE
Ramasami Sastri, K. S., Dhruva and Ramayana ...	318	Stone, Gilbert, A History of Labour ...	149
Rice, E. P., A History of Kanarese Literature ...	686	T.	
Richardson, C. A., Methods and Experiments in Mental Tests ...	685	Takakhav, N. S. and K. A. Keluskar, Life of Shivaji Maharaj ...	69
Rolleston, T.W., The High Deeds of Finn ...	685	Tappan, E. M., In Feudal Times: Social Life in the Middle Ages ...	609
Russell, F. G., B. L. K. Henderson and, Readings from the Bible ...	553	Terman, Lewis M., The Hygiene of the School Child ...	552
S.		Thomson, E. J., Rabindranath Tagore ...	70
Satyanarayanamurti, G., Deductive Logic ...	686	Thomson, A. Hamilton, Selections from the Poems of Sir Walter Scott ...	150
Seers, H. Waddingham, Nature Stories ...	441	Turnbull, H.G.D., Songs of Four Centuries, Part I ...	150
Seers, H. Waddingham, More Nature Stories ...	685	U.	
Smith, W. Bernard, Elements of Natural Science, Part I. ...	72	Underhill, M.M., The Hindu Religious Year ...	468
Sparling, H.P., Short Algebra ...	843	W.	
		Winstanley, Lillian, Chaucer's Prioress's Tale and the Tale of Sir Topas ...	766

INDEX TO EDITORIALS.

	PAGE		PAGE
A.		Educational Benefaction, An ...	689
Academic Independence ...	558	Educational Conference ...	389
Adult Education ...	153, 320, 393	Educational Conference, Imperial ...	691
Advice to Teachers ...	80	Educational Honours ...	442
Appu Sastriar, Rao Bahadur S. ...	391	Educational Profession, The ...	693
Autonomy of Universities ...	770	Educational Publication ...	472
B.		Educational Reconstruction ...	856
Boycott of Schools and Colleges ...	324	Educational Reform in Madras ...	472
British School of Oriental Research in India ...	557	Educational Retrenchment in England ...	154
Butler, Sir Harcourt ...	770	Europeans in the Educational Service ...	558
C.		Experiment in Education, An ...	615
Caste in Colleges ...	445, 475, 554	F.	
Civic University, The ...	253	Federation of University Women ...	79
Communal Troubles in Madras and the Punjab ...	555	Federation of Universities ...	444
Conscience Clause in Schools ...	690	Female Education in Afghanistan ...	443
Criticism, A ...	613	Free Education in Hyderabad ...	442
E.		Free Thought and Official Propaganda ...	774
Education in the Local Council ...	82, 153, 255	G.	
Education on the Border ...	152	Games for Girls ...	617
Education and Poverty ...	614	Government Examinations ...	859
Education, The Need for ...	691	H.	
Education in Germany ...	773	Home Work, Too Much ...	855
		Humour in Children ...	252

	PAGE		
I.		T.	
Impressions of Oxford ...	474	Standard of English in Madras ...	...
Indian Education, 1920-21 ...	251	Starving Intellectuals of Russia ...	...
Indian Students Abroad ...	689	Students and Politics ...	...
Indian Universities Association, An ...	83	Students, Manchester University and ...	...
Indian Universities Conference ...	771	Sub-Assistant Inspectors of Schools ...	44
Influence of the Cinema on Children, The ...	155		
International Intellectual Co-operation ...	442	T.	
K.		Tamil Gurukul, The ...	77
Kitchener College, Delhi ...	151	Tata Institute Enquiry, The ...	25
Krishna Rao Bhonsle, Rao Sahib B. ...	477	Tax on Amusements, A ...	15
L.		Teaching of English, The ...	...
Lawrence Memorial High School ...	321	Teaching Profession in England and India, The ...	...
M.		Technical and Industrial Education in Bombay ...	47
Madras Educationists in Northern India ...	256	Technical Education in Bengal ...	474
Madras Legislative Council and the University, The ...	83	Trades Colleges ...	390
Mathematical Prodigy, A ...	857	Training of the Imagination, The ...	80
N.		U.	
Narasimham Pantulu, Dewan Y. ...	852	University of Allahabad, The ...	30
Never too Old ...	613	University Bill, The Madras ...	554, 693, 851
O.		University of Calcutta, The ...	254, 324, 473
Oriental Conference, The Second ...	246	University of Calcutta and the Bengal Government ...	618
Oxford and Cambridge ...	79, 322	University Corps, The Madras ...	393
Oxford and Cambridge, The Royal Commission on ...	854	University for Delhi, A ...	78
P.		University of Delhi, The ...	152, 320
Poverty of the Educated Classes in India ...	251	University Ideals ...	321
Primary Education in Bombay ...	857	University of London, The ...	445
Public Schools in England ...	859	University of Madras, The Prince and the ...	82
R.		University of the Punjab, The ...	80
Retrenchment in the Educational Department ...	471	V.	
Royal Commission on Oxford and Cambridge, The ...	854	Value of the Classics, The ...	151, 257
S.		Vernaculars as Media ...	473
Scientific Education in Madras ...	...	Vernaculars in Bombay ...	557
Secondary Education Board ...	...	Vernaculars in Indian Education ...	616
Selection Committees ...	392	Visual Instruction ...	250
Senate Meeting, The ...	857	W.	
Sharp, Sir Henry ...	471	Women at Cambridge ...	691
		Women's Education in India ...	692
		Women's University for Calcutta, A ...	77, 527

