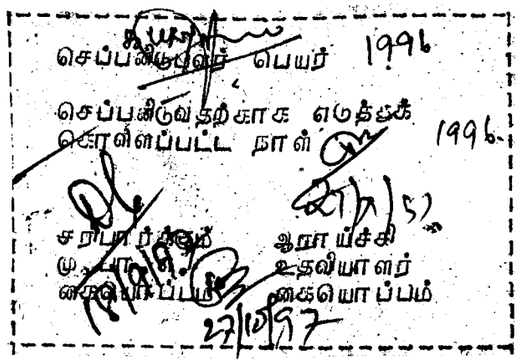

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LUCKNOW UNIVERSITY—CONVOCATION ADDRESS

By

H.E. Sir WILLIAM MARRIS, K.C.S.I., K.C.I.E.,

Chancellor of the University.

THERE are many audiences which I should find it easier to address than this one. The Chancellor of a University, who is also Governor of a Province, risks falling between two stools. If he speaks as Governor upon University education as it affects the life of the Province, not only does he step out of the robes appropriate to the occasion, but also he is likely to incur some suspicion of trying to use his official position to deflect the course of a self-governing institution. On the other hand for me to address you as Chancellor at any great length on the work of your particular University seems to me something superfluous in view of the able review of it which your Vice-Chancellor, whom I am glad to welcome back reinvigorated from his journey to Europe, gave us a few months back.

Convocation speeches often deal with the ideals of the true University. On these lines it was that you were addressed at the last Convocation by that lover and champion of University education, that veteran and outstanding leader, Sir Asutosh Mukerjee, whose untimely death all India since deplores. I hope that I also am an idealist; but I feel a kind of diffidence about putting into words visions which reason tells me are not soon nor easily to be fulfilled. Do not mistake this admission. It is surely good to see visions. "Where there is no vision the people perish." And there are times when it is right and wise to nurse and foster the vision, because by so doing you actually further its fulfilment. We were passing through such a time but a very short while ago when my great-hearted predecessor founded this University. He loved nothing better than to think of Lucknow as

the Oxford of the East: to see this city that was so dear to him the home of a great seat of learning and culture: a city enriched with fresh colleges and halls standing about spacious courts on either side the river, and linked together by a stately University bridge; a place which should allure the best youth of thirteen millions of people, and invest them with a common culture and the serenity which comes with wisdom. All honour to Sir Harcourt Butler for his generous inspiration and the lead he gave us. Let us hold fast to the one, and follow the other. I know that this audience wil be glad to hear that Sir Harcourt has accepted a proposal which I made to him; in pursuance whereof I, acting as Chancellor, in virtue of the powers conferred on me by Section 16 of the Act, hereby appoint him, in recognition of his great services to the cause of education, a Life Member of the Court of the Lucknow University.

But there are also times when we best pursue the gleam by looking closely to the ground under our very feet. I think that such a time is on us now. We have emerged from a period of crisis and new adventures and are beginning to realise that we have still some way to go. Money is short, though that is perhaps the least of our difficulties. Old prejudices and old errors die hard: and even education with its sword of enlightenment cannot instantaneously dispose of all the wild beasts that infest the pilgrim's path. It is a time for patience and organisation and consolidation; for reviewing steps already taken in the light of experience so far gained, for listening to criticisms and determining whether they have substance, and for deciding whether there is anything that can be bettered within the limits of your financial resources. Such I am assured is the policy which the Directors of this University have been pursuing. Of that I will say only that I am confident that for the present moment it is the sound policy in University as in other matters, and that courageously and perseveringly pursued it will eventually lead us to the dawn.

I will take this opportunity of announcing some changes in the *personnel* of the University Court. Two months hence the term of office expires of eight members appointed by the Chancellor. Some of those so appointed are already *ex-officio* members and there is therefore room for new blood. I propose with their consent to re-appoint to the Court the following gentlemen, namely:—

Raja Muhammad Ejaz Rasul Khan, of Jahangirabad;

Raja Kali Charan Misra of Bareilly; and

Nawab Saiyid Muhammad Ali:

and in place of the other five members to appoint—

Chaudhri Mujtaba Husain, Barrister-at-Law;

Mr. J. C. Kempster, M.B.E., Principal of the Training College;

Rai Bahadur Pandit Sham Bihari Misra, Registrar of Co-operative Credit Societies;

Nawab Muhammad Yusuf, M.L.C.; and

Raja Saiyid Ahmad Ali Khan Alvi, M.B.E., of Salempur.

So much, gentlemen, for what I have to say as Chancellor. But when I was at college, Convocation Day was above all Students' Day and it is to the under-graduate students —not to those who have to-day received their coveted diplomas—that I am going to address most of what I have to say. They are after all the most important part of the University

—those members of it who have still to win, and, also what is much harder, thereafter to wear worthily the graduate's hood.

I want, if I can, to speak directly to the students as a student myself—not merely as one to whom it was of crucial importance as it is to many of you—to pass his examinations rapidly under the necessity of earning a living: but as one who hopes to his dying day to retain some interest in new things, some desire to enlarge the borders of his knowledge, and some prejudices as to the most hopeful ways of doing so. For it is generally agreed that there are right ways and wrong ways of study. But though I may hope that I have occasionally found the right way after experience of the wrong, yet you will remember that I speak as a mere empiric, and if anything I say clashes with what your professional and lawfully-constituted advisers have told you, then I hope that you will forget my words as those of the untrained amateur.

What leads most surely at all to knowledge is perhaps something that is a gift of the gods. It is none other than the passion for knowledge. The true student is not merely a learner: he is not merely (though always he ought to be also) a disciple: essentially he is the pursuer, the one who desires: the real *Talib-'ilm*, the seeker after knowledge. Examinations, scholarships, degrees, and the income to which a degree may lead are really all incidentals: we cannot ignore them and at times they are dreadfully importunate: but yet the true student is he who finding himself face to face with the mystery and richness of humanity, sets himself down to the heroic task of acquiring as much understanding of it as is possible in the span of human life with the mind and senses with which he is equipped and which he intends to train by the way. It is the hunger and thirst after knowledge—for her own sake, because of the charm and beauty of her—that makes the true student. The true student must be not a little of a true lover.

Such a one I can imagine, indeed I have known—sitting down as for instance Herbert Spencer does—to plan out the entire field of human knowledge as in a chart, and then to decide how and in what order he will explore the whole of it. He draws out the sciences in their relation to each other as in a genealogical tree, and he cons it over. While that high spirit of adventure holds him, he feels equally drawn to beauty and achievement whenever he may encounter it—in the plilosophy of the sages, the music of the poets or the drama of history, in the mysteries of the atom or in the Einstein's theory; the grace of handiwork in some marvellous refinement of the natural kingdom, or the analogous beauty of some curve or series in pure mathematics. They all appeal to him, my ideal student. He gasps at the richness of the intellectual feast before him: and he sighs to think that life is all too short to conquer all these worlds, and that as a practical man he must begin to discriminate, to choose the main object of pursuit, even if he still makes others a recreation.

So he comes face to face with the question of an aim; and he will find the answer according to the bent he is born with, or some external impulse that is dominant with him. Each must decide the question for himself. With any answer that I may suggest others will disagree: and yet putting myself in the ideal student's place I would answer the

question by saying in the first place "the proper study of mankind is man," even if one disagrees with Pope's assertion that the range of study should be confined even to that immense target.

Not for a moment do I imply that the knowledge of one's kind is best attained along any particular line or set of lines. The astronomer, the mathematician, the bacteriologist, the physicist, the biologist, the engineer—there have been living examples of them all to prove that each of these callings may make a man as humane, as broad-minded, as tolerant, as brotherly a human being as any other course of study. But no one need shrink from affirming his own private convictions, and to me it seems that on the whole it is the course of human events and human capacity and character, as disclosed to us in literature and history, in economics, law, political science, and moral philosophy that fits and trains a man most immediately to play his part in life as a citizen. In saying this I know that I am up against the critics who assert, and assert with cause, that the bane of higher study in India has been its fanatical dedication to the 'humaner letters.' But there is no inconsistency in recognising a difference of utilitarian and theoretic values. For the moment I speak as a theorist. I hold that the greatest service that education can possibly do to India is to make her sons good citizens. I acknowledge the immense value of the training which science can contribute. Further, I concede the clear need for scientific and practical training to correct other tendencies. And yet if I stood here, one generation younger, in the place of one of you Indian under-graduates before me, desiring to play a part in the advancement of my country and if practical considerations left me free to choose, I should rightly or wrongly prefer to pursue those paths of study which would tell me how other peoples passed through the travail of nation-making, and I should endeavour in the language of the Psalmist, "therefrom to suck out no small advantange."

This is a digression. I was aiming at the proposition that the student should choose his sphere and choose considerately. Let him resolve to explore a specific field, and let him approach it in the right order, choosing his subjects so that each forms the right introduction to, the right basis for, the next. Such collocations of subjects for a degree as *English-Persian-Chemistry*: or *English-Economics-Zoology*, which used to be possible once under bad old academic regulations—though I am glad to know that they are possible no longer—were almost a denial of the cause of education. The men who adopted these ingenious combinations may very likely have found the easiest path to a degree; but they certainly did not get far along the road to an education.

Let us think of the qualities which we want to find in our citizens of the future, and consider what methods of study are likely to evoke them. India aspires to be a full member of the community of nations, respected by all the others not for her past memories, but for her present capacity and culture. But this is a competitive age, and there is little sentiment in international affairs. The men who are to sustain this country's reputation in the eyes of the world must be practical, cultured, exact, decisive people, knowing precisely what they think and why they think it.

I suggest that orderliness should be the first aim of our ideal student. Sometimes, as in logic or mathemafics or Arabic, order is

imposed upon him, Sometimes he has to find it for himself. In many subjects—whether it is constitutional history or English literature or a play of Shakespeare—there are certain salient points which can be seized and occupied at the outset. The beginnings of Parliament, the destruction of the old nobles, the restoration of personal rule and its downfall under the Stuarts, the rule of aristocracy under the guise of Parliament, the Reform Bill and the broadening of democracy; these are the turning points of English history along one line: just as her severance from France, her disowning of the Papacy, her taking to the sea, her founding overseas dominions, her resistance to the domination of Europe by any single Power, her break with America, are the main points along another line.

Take again the story of the greatest war in history—what are the essential points for the student to make sure of? I suppose they are the invasion of Belgium, the battle of the Marne, the locking of the western lines, the battle of Jutland, the submarine campaign, and the entry of America. These I put first, not because they tell the whole story, but because they seem to me to lead most directly, unerringly to the finale, more directly (though here I am on debated ground) than even the immense events in Russia, Gallipoli and Mesopotamia.

Or take a much homelier case: the common case of the non-mechanically minded man who becomes owner of a motor-car. Anxious to understand its working he peers inside, and sees a mass of contorted metal viscera, black, oily and repellent. If he investigates them haphazard I am sorry for him. But suppose he says to himself "There must be method in this madness. This beast must have not merely a bony framework but also an alimentary canal, a muscular system, a nervous system; why, it has even eyes and voice" then he is on his way to come much quicker to an understanding of the petrol-feed, the ignition, the engine, the transmission, the controls, the lighting and the electric horn.

What I have been saying about the taking of things in the right order is only one form of the doctrine of economy of effort. As you know in American workshops this has been exalted to a science. Lecturers instruct workmen how to perform each movement of hand or foot with a view to the conservation of muscular energy. The trained athlete also knows something of the art. It is much the same in reading. Cultivate the habit of looking for the essentials first, because that is the economic method of study.

Once get the main props of the building fixed firm and in the right relation, and it is easy to fill in the interspaces. Not all these are nearly of equal interest or value, and the wise student will concentrate on those which attract him most. But in any case let him pick out for exact and accurate knowledge some special section, some outstanding detail of history, some particular investigation, or some passage of wisdom or beauty in a book, and make it his own to the last comma. We are warned against undue memorising: and to memorise without understanding is in truth a sterile labour; but when you come on what you yourself feel is good for you, then by all means get it by heart. There is no way of possessing a subject without laying by the best bits of it securely in one's head. The knowledge of a dozen of the finest passages in Shakespeare or Shelley will do more for a man's culture

than reading many commentaries on these writers.

Next in order I suggest come accuracy and thoroughness, qualities, more difficult to cultivate in another language than in one's own. It is the peculiar gift of natural science, mathematics and logic that they insistently impose accuracy of observation and closeness of reasoning on us. But with literary subjects it is different. Words are of all things the most deceiving: and never more so than when they seem familiar and we have forgotten to watch them closely. What we need is to make sure that words correspond to things; never to let ourselves be dominated by symbols, phrases, catch-words; but to look through these and behind them to reality. This is by no means easy. I believe the best help lies in writing. Here comes in the value of original expression. It is all very well to be made a full man by reading; but it is writing (says Bacon) that maketh an exact man. We can only be sure of our understanding of a matter when we begin to put it out for ourselves. Commentaries and paraphrases of an author have their use; but it is better to expound him for oneself and to blunder in the process than slavishly to follow other men's expositions. It is better to try and to fail, even to fail badly on one's own account, than not to try at all. What Browning says about "the unlit lamp and the ungirt loin," strong saying as it is, has a biting moral for each of us.

One word as to the manner of exposition. If I had to teach writing in an Indian University I should insist *ad nauseam* on the value of simplicity. The more simple and the more direct you are, the better will your words express your thought; and the effort to find the right short word will do much to clarify thought. It was unlucky for India that she began to model her expression on the great writers of English at a time when they themselves were so charged with classicisms and ornamentation, traceable to the influence of that highly ingenious and elaborate writer Sir Thomas Browne. We never have recaptured in this country the clean, brief Saxon speech. And I confess with regret that our own official language has done much to stereotype bad habits of English. There are many honourable exceptions. But I believe that more than half the written output of our offices and secretariats is expressed in a weak and wordy jargon. We are vague when we ought to be definite: we inveterately prefer the abstract to the concrete: we fill out sentences with needless and meaningless padding (like "having regard to all the circumstances of the case"); we love mechanical and otiose adjectives and adverbs; we slither into deformities of syntax which will not bear inspection: we glorify the commonest of wayside objects (like railways or forests or joint stock companies) with capital letters; and above all if we can possibly convey our meaning in the passive rather than the active voice, that is if we can recoil from a positive convincing affirmation, we do so: all of which things are wrong and of bad example. I am not sure how all this has come about: partly perhaps from our having inherited insincere models; possibly from some desire to sustain the artificial dignity of diction of the Moghul court; but mainly I suspect from indolence or fear of making mistakes through trying to be too precise: in fact from lack of concentration. Listen to what Henry James said about the changes which he saw happening to the English language in America twenty years ago. "The note of cheapness—of the cheap and easy—is especially fatal to any effect of security of intention in the speech of a society; for it is scarce necessary to remind you that there are two very kinds of ease; the ease that comes from the conquest

of a difficulty, and the ease that comes from the vague dodging of it. In the one case you gain facility, in the other case you get more looseness." A commentator praises that phrase of his "security of intention," as shining like a searchlight, as clarifying and intensifying the argument for the coherent culture of speech. There is certainly not enough "security of intention" about our official writing; and both for our own sakes and on account of the bad example we are setting I hope that it is not too late for us to amend our ways.

And here I would add—do not be afraid of revising. Rarely one dulls and stales one's work by over-elaboration. Much more often one does not take care enough. There is often so much to be said that the manner of saying seems to matter little. It really matters much to the reader and even more to the writer. There is always something better in you than you have put forth in the first free easy movement. There is much to be learned from looking at the manuscripts of great writers. Seldom are their emendations—their second or third thoughts—wrong. And remember also this: there is no material so easy and plastic to work in as words—words so long as they are in manuscript, *kachha*, unprinted; but once you bake your language into type, once you print and publish, once even you sign a letter, words are of all things most intractable and rigid. Is not that a reason for taking much care with them?

One more point. I spoke of accuracy and thoroughness. You remember that fine poem called "A Grammarian's Funeral." The scholar who gave his life fanatically to the smallest minutiæ of scholarship is carried for burial to the lofty mountain top, because the intensity of his devotion showed the loftiness of his spirit. I do not hold him up for universal imitation. But there is wisdom for us all in the lines:—

"That low man goes on adding one to one,
His hundred's soon hit:
This high man, aiming at a million,
Misses a unit."

Genius, command, fame and glory, these are not in the reach of every man. "Always keep in mind the weight that your shoulders can bear," says Horace. Better modest achievement than ambitious failure. If a man sticks to it steadily and earnestly, "precept upon precept, line upon line, here a little and there a little," there is no fear of his failing. The image of the true learner that comes readiest to my mind is a picture of the bricklayer (it occurs to me belatedly that the image has some unhappy associations), I mean the good bricklayer, not worrying about styles of architecture or letting values, but setting well-baked brick on brick in good tenacious mortar, and giving the whole of his skill to the task, until the complete house solid and four square emerges from his hands. That is the way in which many of our best scholars have worked.

I expect you have been waiting to hear me utter that ominous word—"discipline." I know it has no grateful sound in students' ears, because they seem to regard it as merely equivalent to saying, "Don't do that!" But really this view is not quite fair to the word: archaically it means "learning," ordinarily it means "ordered learning," and only incidentally does it connote correction or punishment. Those who preach discipline generally dwell on the moral benefits which it confers upon those disciplined. I too believe in those but I am not going to labour the point, because you have probably heard enough of it already. I want you to think of discipline not as a matter of external restraint but of internal grace, indeed as a necessary factor in any worthy achievement. Co-ordination, even-

ness, unity, economy of time and effort for actual results—these are the fruits of it. Let me cite two witnesses whose words ought to carry weight with you. When Mr. Chintamani, who was afterwards Minister of Education in these Provinces, came back from England about 1919, I remember his telling me how immensely he had been impressed by the self-imposed discipline of the people as making for efficiency. My other witness is the late Mr. Bhupendra Nath Basu. I was standing alongside him on the deck of a cruiser during the war, and I shall never forget how he broke out in words of admiration as the blue-jackets went smartly to their posts and put the ship in fighting-trim the moment she left harbour. You don't get high efficiency like that by any system of repression and punishment. The sense of the value of discipline is deep-seated in the men themselves. It is just the same with a University. Teachers cannot give, nor can students receive, up to their full capacity without it. Therefore I say cultivate discipline, if for no better reason, as a most valuable ingredient in success.

When I ask Principals and Lecturers whether their pupils are industrious and work hard I am confidently assured that they work very hard indeed. I will not let the fact that they always seem ready to ask for holidays outweigh that assurance in my mind. I believe that there is no reason then for me to say "be diligent." I will rather say "do not work too hard." Don't overtask brain and eye. You have got to keep a reserve of strength, and vitality wherewith to grow. University days ought to be in India, as they are elsewhere, one of the happiest times in a man's life: a time of cheerfulness and expansion when one makes new friends and is conscious of new stirrings and new capacities, and realises the pleasure of living. Exercise and games are as necessary to the healthy student as meat and drink. I am not thinking entirely of games which encourage combination and exalt the cause above the prize, though every one knows the virtue of them. But as an American public man pointed out the other day, games are good because as the saying goes "they take it out of us." What they take out is something of that impulse to conflict which is strong within us all from the cradle. If that old instinct cannot find a safe outlet, it will break out in restlessness and unhappiness, in quarrels and useless violence of thought and action. Debates are another healthy way of working off the same impulse. But when we have summed up all that the class-room, the hostel, and the playing-field can provide —the interchange of views, the talks with tutors, the development of wind and sinew as well as of mind, there is still room for the individual to treat himself. It is wise to have some private diversion of one's own. I notice that people who can go and watch little birds through field-glasses or who collect flowers are generally quite happy about it. There is much to be said for photography; something to be said for keeping a diary; something even to be said for collecting postage stamps, if only you are keen enough. One innocent and useful recreation is to keep that despised thing, a commonplace book, and to record as you meet them the striking events or sayings of the hour. There is always so much worth garnering by the wayside which we let go for want of method. In particular I beg you, cherish the amusing things: there is great virtue in laughter, and a store of humour will be a help to you when things go wrong.

This brings me to my last point. I believe that my honourable colleague the Minister for

Education is absolutely right in saying that we do not give beauty its due place in education. Certainly if I had the money and power to complete this University in brick and stone, I would give you not merely laboratories and class-rooms, but art and music too. One sees that the need exists. It is the hunger after colour and form that is partly responsible for the prints which hang in hostels and common-rooms. I do not wish to criticise them; but who would deny they might easily be much better? I would like to see the walls of University rooms furnished with really good photographs of the great Indian monuments: the Taj Mahal and the Kutb Minar; the Black Pagoda and the Kailasa Temple; the stupas and carvings of Sanchi. There should be casts of all the finest statues, and good prints in colour of the great Ajanta frescoes and the best work of the modern artists. And I would like to see these multiplied in smaller reproductions so that they should find their way first into students' rooms and so gradually into the better class homes of India. Taste is formed by dwelling on beauty, and with a sense for beauty comes a happiness that is certainly not of earth, but as it were a gift of the gods. It seems to me that here, and by no means beyond our reach, is a way of enriching the intellectual life of our young men which some benevolent philanthropist might readily pursue. Perhaps after we have seen the Exhibition of Indian Art which, thanks to the Hon'ble Rai Rajeshwar Bali's initiative, is shortly to be opened in this city, some one may be moved to act upon the idea. At all events, Mr. Vice-Chancellor, I hope that the University authorities will encourage your students to see the Art Exhibition and to attend the Musical Conference and so to familiarise themselves with the best that India has produced in the two worlds which satisfy the eye and ear.

Ladies and gentlemen, I am grateful to you for the way you have heard me at this length. Students of the Lucknow University, your intellectual Mother—young as she is to have nurtured so many sons—has done much for you. You are under an obligation to maintain her good name. That you will do best by striving constantly to be strenuous, courteous, broad-minded, self-controlled, hopeful and brave. Struggle, effort, disappointment there must be; these are the pains of growth. Perhaps we officials do not always realise as vividly as we might some of your handicaps and difficulties. But you may be sure that we have had our own; and what matters more than the character of the trial is the spirit in which it is met. Never was the right message to youth better uttered than in the words of a poet whom I have quoted twice already—why, I do not know, unless I feel instinctively that he affords the right medicine for our times—but in any case they are brave words:—

"Then welcome each rebuff
That turns earth's smoothness rough,
Each sting that bids nor sit nor stand but go!
Be our joys three-parts pain!
Strive, and hold cheap the strain,
Learn, nor account the pang; dare, never grudge the throe!"

THE PLACE OF HISTORY IN THE SCHOOL CURRICULUM.*

THE place of History in the school curriculum is still a debatable subject. Speaking generally we may date its inclusion from the time of Arnold's headmastership of Rugby. He may be considered the pioneer of the venture. His assertion of the value of History and its claims to a place in the school curriculum led to its gradual recognition as a school subject. But though it has remained in the curriculum, opinions are still divided as to the reason for its inclusion, the purpose for which it should be studied and consequently the methods which should be employed in teaching.

A consideration of the curriculum of an ordinary school would not reveal similar doubts upon other subjects with the possible exception of Geography. The teacher of languages, science, mathematics or drawing does not stop to consider why his subject is in the school course. He knows that his subject is adding to the pupil's stock of knowledge, training his mental faculties and developing his intelligence. Broadly speaking, too, his method of teaching his subject would be known and adopted. But if the History teacher is asked why his subject is taught in schools, a variety of answers, variously inaccurate, would be given. Some would say that it is taught to rouse the imagination or the interest; others, for the moral lessons that it can teach; or for civic and patriotic purposes; others, to train the judgment or to enable the present to be understood and interpreted. With this confusion and uncertainty of aim it follows that there will be found confusion and uncertainty of method.

The aim of History teaching, and consequently the method, is undoubtedly clearer in the teaching of the lower forms. In the primary classes the appeal is to the imagination. The intention of the teacher is to arouse interest and set working the imagination by picturing the past. His method is consequently narration and illustration. The teacher's success will depend upon his capacity to make the story interesting and to present suitable pictures and diagrams. And so again in the lower secondary forms, with children from ten to thirteen years old, the work remains mainly receptive. The teacher deals with his subject biographically, stirring the interest of the child in the deeds and characters of famous men of his own and other countries. His aim here is ethical. In this stage, side by side with the reception of ideas from the teacher, the child may have to acquire by his own effort certain more or less useful facts. The point is that in these early stages the work is mainly done by the teacher; the child does nothing more than employ his memory and imagination. We may say, too, that broadly speaking teachers are unanimous in taking this view of their work in the lower school and follow generally identical methods.

The difficulty occurs when the upper forms are reached. It is here that we get diversity of aim and uncertainty of method. Many assert that the educational value of History is ethical. It must be included in the school course to inculcate various virtues, *e.g.*, patriotism. If that is so, it is clear that the subject must be taught to all; we can't have the History specialists monopolising the civic virtues; we must give all equality of opportunity, and

* A Paper read by Mr. E. W. GREEN, M.A., *Principal*, Government Muhammadan College, Madras, before the Madras Teachers' Guild Annual Educational Conference, 1925.

under our system in India make history an A and not a C subject. Its place in the curriculum would have to be altered. But should it be an A subject? If the acquisition of virtue is the aim of History teaching, then a written examination is no test and we shall have to make History a B subject—and we all know what that means.

Or again there is a section, frequently heard in the papers and at meetings, who want to ensure that all boys acquire at school a knowledge of their country's history. They have apparently nothing more in view than that their children should be acquainted with the principal characters and events in their history. If that is the aim of history, all we want is two periods a week with a strong disciplinarian in front of the class and strong memories for him to act upon, followed by an ordinary test. It should be made an A subject, for all would have to be taught and examined.

If either of these two aims, or a combination of the two, is accepted as the principal aim of History teaching, then it seems that History can never occupy a place in a school course commensurate with other subjects—languages, science, mathematics or geography taught on scientific lines. All these subjects involve intelligent effort on the pupil's part, but this kind of history demands only a memory. For all the training a boy gets he might as well, even better, be learning by heart some good literature. But if history is to approximate in educational value to the other subjects of the course, it must approximate to them in aim and methods. If it cannot do so then its place in the curriculum must be altered. In our S. S. L. C. course, for instance, it should not rank as a C subject, unless it can provide a good mental training.

Languages, mathematics and science are taught as much for the development of the mental faculties as for the contents of the subject. The value of a classical training in English schools is not merely that it brings the student into contact with a great literature, but that it provides a stimulating mental exercise. In the same way the quantity of mathematics we learn is not limited to acquiring the processes the average person will apply in after-life; the subject is taught for the mental training it gives; so too with science. If History is to rank with these subjects in the curriculum, it stands to reason that it must provide a valuable training. The boy must get as much out of History intellectually as another out of science or mathematics, while those engaged in teaching or whose duties it is to determine a course of studies must see to it that the alternative courses that they provide are of educational value. A boy who takes, under our Madras course, History and languages as his optional subjects should emerge from his course as well equipped mentally as those who take advanced mathematics or science group. The goal is identical for all, but it may be reached by various methods. For some minds a literary, for others, a scientific course is the more fruitful—the only point is to ensure that each is so taught that the mental faculties are properly developed.

Now I think that no one who has had experience of History in schools and in inspecting classes or valuing papers in the public examinations, or who has had to deal in colleges with the products of the school system, will be in any doubt as to which course gives the better training. The History course should turn out intellects as well-developed as the science group, but there is

little doubt that the science boys go to the University or to a profession with minds better trained than the History boys. It is not only that the cleverer boys take science and mathematics—why should they?—but rather that their brains are better developed. During the two years in Forms V and VI while the science and mathematics classes are making clear progress, the History class tends to stagnate. The reason is that neither History nor Language is so taught as to make much demand on the boy's brains. The class is not called upon to make an equal mental effort to that exacted from the parallel science group. It is not so alert. The most casual observer would notice the difference on entering a class-room in which mathematics or science was being taught and one in which History was the subject. In the former, in 80 per cent. of the schools, the class would be working out some problem or exercise under the guidance of the master. In the latter they would be listening to a statement of facts and at most giving bald answers to disconnected questions. In a few schools he would find more intensive training—something more than the operation of listening and memorising—but in very few. He would in fact find the mathematics and science boys working independently to a much greater extent than the History boys. He would very rarely find the History boys doing anything for themselves. The History class is too receptive, the master too expository.

It will be said that mathematics and science are subjects which lend themselves more readily to individual treatment. That is undoubtedly true of mathematics and by insistence on practical work it has become true of science also. But it was not always so. Thirty years ago, Geometry, for instance, meant little more than a good knowledge of the books of Euclid, which could be acquired by a good memory. To a much more recent date in India, science meant little more than a text-book knowledge of chemistry and physics and memory again came largely into play. The teaching of those subjects has been completely revolutionised. And there is no reason why the teaching of History should not undergo a similar change. The teaching of Geography is in process of alteration. History alone halts far behind. But there is no reason why the History-master should not learn something from the methods of his scientific colleagues. The valuable lesson that the science boys learn is to bend their minds to the solution of problems. They have to find out something for themselves—daily in mathematics class—weekly at least in the laboratory. When they are not solving problems independently, they are observing a master engaged in the work. The weak point in the teaching of History is that neither the boys nor the masters bend their minds to the solution of problems. The vast amount of the work done consists in statements of facts and the process does not add a fraction of a cubit to the mental stature of either. History too should be employed as a means of developing the intellect and not merely for the acquisition of facts. As in science, training is given by setting boys to test and classify for themselves the ascertained laws and phenomena of the physical world, so in History they must be set to classify and examine for themselves the ascertained facts of the political world, using political in its literal sense of that which appertains to a State.

To consider how this can be done it will perhaps be simplest to consider the boy at

the time of his final examination in school, not because the examination is the goal of the teaching but because it is the test of the training. Mathematics, Science and History candidates alike will have a number of exercises to do to test their knowledge and intelligence. The exercises will not be identical with those that have been set them in class, for such a method would only test the candidate's knowledge, but they will be new exercises similar to those that they have done or should have done in the class-room. The mathematics and science candidates will find that they are called upon to do exactly the same kind of work that they have been doing for the last two years in class. There will be nothing strange or unaccustomed. They will work out arithmetical or geometrical problems or handle some physical apparatus or chemical material as they have been taught to do. The wretched History boy, however, finds himself for the first time perhaps, set down to do something that he has not been trained to do. The environment is strange to him. He misses his master's voice. For once in his historical course he finds he has to do something by himself unaided by master or books. The result except in the case of the clever boys is chaotic. His mind has never been trained for the work he has to do, whereas the constant training of the mathematics or science boys to independent work enables their minds to come readily into action when the crucial moment arrives.

The mind of the History candidate should have been trained to do these things. It will have to select the facts required to work out the exercise, to arrange them logically and to express them lucidly. All these processes must be taught for years before they can be employed readily by the average mind. A glance at the examination papers of most of the centres will show without a shadow of doubt that boys have been trained to do none of these things. Irrelevant matter, chaotic arrangement and confused language mar the work from start to finish. Mathematics candidates would bungle just as badly if they sat for two years and watched the masters working out sums on the blackboard, and science boys if the master merely demonstrated to them throughout the term and then expected them to perform the tests themselves on the day of the examination. A reformation then of method is what History demands before it can take the place intended for it in the school curriculum.

History is capable of the change and is ready for it. All that is necessary is for the History master to have his periods for practical work as a Science assistant has and if possible two consecutive periods. Then I would suggest that the masters should frame sets of problems, suitably graded for Forms V and VI, writing them on cards as his science colleague does, and giving each pupil a separate problem to work out. His work would consist of selecting from his text-book those facts which he required for answering the question, putting them down in a list for the master to check. His next step will be to classify the facts he has selected and arrange them in the logical or chronological order. When that had been done to the satisfaction of the master, an essay would be written without reference to a book in the next practical period. If such a method as this were adopted, History would afford as good a mental training in school as mathematics and science and almost as good as the classics. In fact it would have the advantage of mathematics and science because not only the pupil would be trained to manipulate his

material, but to express himself as well and it is in their lack of training in expression that those subjects are weakest. Treated in this way History can afford the best training not only for school and its examinations, but for life. An extraordinarily large amount of the world's work calls for the employment of these three processes—the selection, the arrangement and the expression of facts. Not only teachers and lecturers, but Vakils, politicians, journalists and business-men, to give the most obvious examples, constantly have to employ them.

As examples of historical exercises, I would suggest at first simple questions of this kind:—

(*a*) Make a list of the facts in some reign (*e.g.* William III) which illustrate his foreign policy.

(*b*) Enumerate the facts that would be required to give (1) an outline, (2) a description of a war or a political movement.

(*c*) Make a list of the points (1) of comparison, (2) of contrast between two periods or careers.

(*d*) Make a list of the facts which illustrate (1) the career, (2) the character of some statesman.

In Form VI extracts from documents might be given for analysis and deduction.

By the adoption of such a method of teaching History, three valuable results will be obtained. In the first place, individual work will be promoted. On thispoint enough has been said. A second advantage is that work can be better graded. One of the many defects of History teaching in school is the unprogressive nature of the instruction. Except quantitatively there is not sufficient difference in the standard of work in the Upper Forms. Form VI has more to do than Form V and Form V more than Form IV; but the kind of question asked in class or in the examination is much the same and much the same standard of written or verbal answer is accepted. Exercises, however, such as have been indicated can easily be graded. Take for instance, an exercise in character study. Form IV might be asked to make a list of those facts which illustrate certain characteristics, the characteristics being "given" (as they say in mathematics). Form V could discover both characteristics and illustrative facts; Form VI could be set to compare or contrast two characters or to trace the effect of their qualities upon their political careers. There is endless scope for exercises in a variety of grades. Thirdly, this method gives a boy an object for his reading. One of the worst intellectual vices of Indian students is the unintelligent reading of a book over and over again. It is contended that this is work when it is obvious that no faculty is being employed, but the memory. Students are content to sit with a book before them for hours until their minds become drugged with words. Give them a subject to prepare, give them an object for opening the book and insist on the results being put down in writing, as a science student puts down in his observation book the results of his work, and their whole mental outlook is changed.

Now, though I have emphasised in this paper the importance of method, I do not want to create the impression that History is a subject that should be taught only as a mental exercise. My point is that that aspect of the subject has been neglected and that until it is recognised, History could not take its due place in the school curriculum. On the other hand once recognised the importance of method and all the rest can be added to it. The master who wants his class to have a thorough knowledge of a certain set of facts could not devise a better method than by this indirect teaching of them. Facts will look after themselves; he will find in learning a language vocabulary will look after itself, provided the teaching method is sound. And the master who teaches History from an ethical standpoint will gain rather than lose by the indirect attainment of his purpose. He will have numbers of opportunities of pointing his moral without making the inculcation of patriotism or any other virtue, the prime object of his teaching. History is an inductive science from which may be derived a knowledge of the principles on which men act, but while recognising the philosophic value of the subject, we must employ it also to train the equally important faculty of observation.

PROGRESS OF EDUCATION IN THE MADRAS PRESIDENCY.

(3) THE DESPATCH OF 1854 AND AFTER.

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I. STATE OF EDUCATION ON THE EVE OF THE DESPATCH OF 1854.

WE had occasion to write of the progress of English education in the Madras Presidency down to the creation in 1854 of a special Department of Education which necessitated the appointment of a Director of Public Instruction.* Subsequently an attempt was made to trace the progress of education in our Province in the course of the eighteenth century, the progress being largely due to the activity of Protestant Missionaries beginning with Ziegenbalg and Plutscho and closely connected with the S. P. C. K.† Therein it was shown how the educational activity though not attended by striking results, was yet marked by steady progress. The bulk of the classes that received the benefit of English education seem to have been the Eurasians with a few Indians of the higher castes sprinkled among them. The University Board which was originally started by Lord Elphinstone in 1842 was reorganised by Sir Henry Pottinger in 1852, and started its work with a comprehensive minute dated 2nd July 1852, "not only for promoting the successful progress of the institution (High School) under their own immediate charge, but also towards organising other institutions with a view to the more general diffusion of education throughout the Presidency."‡ In its view

* The Beginnings of English Education in Madras—in *The Educational Review* for November, 1922.

† Progress of Education in Madras in the Eighteenth Century—in *The Educational Review* for October 1923.

‡ Richey: *Selections from Educational Records*: Part II, 1840—1859, pp. 213 *et seq*; and Sathianadhan: *History of Education in the Madras Presidency*, p. 38.

ie measures which had to be immediately ommenced for the realisation of the above bject were the establishment of public xaminations for granting certificates of edu-ational attainments, the foundation of Pri-nary Schools both at the Presidency Town nd in mofussil stations commencing with the four Collectorates of Malabar, Bellary, Tan-jore and Masulipatam, 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 adequately advanced to enter a High School course, or "as soon as such competent scholars may be raised in the Primary Schools or otherwise;" and also the appointment of public examiners and one or more Inspectors of Schools. The Board considered that the appointment of one Inspector would be sufficient in the first instance, and that his immediate task should be "in conjunction with the Headmaster of each projected school to found and organise each such seminary and subsequently to superin-tend an assigned number of them under the guidance of our Board." In the Primary Schools particular attention was to be directed to vernacular instruction, the object being the eventual acquisition of a thorough grammatical knowledge of one language by all candidates for admission into the several High Schools, while vernacular instruction in these latter should be directed to "the critical and philo-logical cultivation of those languages, with the special view (independently, of general objects) of training competent teachers, translators and original authors in the vernacular languages." The Board also re-commended that rewards should be offered for "the production of good expositions in the vernacular languages of standard works suited to the purposes of education."

It was now that the Board recommended that grants of sums in aid might be given to "permanent and prospering institutions without distinction as to religious discipline or tenets, by which system not only would cost be materially lessened, but differences on religious grounds avoided." The recommendation was practically rendered ineffective by the added statement that the condition of the country then did not appear such as to admit of the practical adoption of such a course immediately.

The cost of the various measures recom-mended was estimated by the Board to be about a lakh and a half of rupees per annum. There was a good deal of discussion and disagreement about the proposal to open Training Schools and Normal Classes. Gov-ernment however was in favour of their being opened immediately, though it made a com-plaint that the Board's estimates of ex-penditure on all heads were excessive and ordered the latter to submit a more economic-al plan.

According to the revised scheme put forward by the Board, provision was to be made for the establishment of a Primary School and a Collegiate Department in the so-called Madras University in addition to the existing High School; and also for the formation of Normal Classes for training teachers both in English and in the vernacular languages. The Primary School which was to serve as a feeder to the High School was to be started, especially as Pacha-yappa's Central School, which had been es-tablished a short time before under the management of an Indian Trust Board, was found inadequate as a feeder. The Collegiate Department was to impart instruction in Literature and Science and four Professors teaching Mathematics and Physical Science,

History, Political Economy and Mental and Moral Philosophy, English Literature and Composition and Law respectively were to be appointed. The recommendations for the starting of Provincial Schools and for giving grants-in-aid were repeated.

Government considered that so far as the starting of the Collegiate Department was concerned, the scheme was premature; but ultimately under repeated pressure from the Board, the Governor, Sir Henry Pottinger, took upon himself the responsibility for sanctioning the entire scheme with the ex-ception of the Law Class which was referred to the Court of Directors for orders. For some time there was difficulty in filling up the classes both in the High School and in the Collegiate Department; and it was thought that the fee charged, rupees four, was too high. So in 1853 the rate was brought down to two rupees in the College and the High School and one rupee in the Primary School; and "this reduction was followed by the immediate accession of some fifty scholars to the senior department." Government continued to entertain doubts whether "the University" had succeeded in producing any beneficial results. But it was maintained by Mr. A. J. Arbuthnot that the students who went out of the High School obtained em-ployment and promotion in Government service with great facility and ease and that out of 36 scholars who had taken Proficiency Degrees until 1853, as many as 22 were em-ployed under Government on salaries ranging from Rs. 40 to Rs. 315 a month—one of them being Deputy Dewan under the Maharaja of Travancore, seven holding situa-tions as teachers in the University, in Pachaiyappa's Central Institution and in the Cuddalore Provincial School, and four others being prosperous merchants. Moreover Mr. Arbuthnot maintained that the scholars of the High School were looked upon by Government as morally superior to others who had no such training. As Dr. Satthiana-dhan points out, the attainments of some of the senior students were of a high order according to the reports of their examiners; and further "there was an entire absence of *cramming* which is considered to be the evil in the present system of education." Mathe-matics was the subject in which the students were most successful and the answers of the candidates in papers on English displayed a perfect mastery of the language and literature. But Mr. Arbuthnot had probably the suspicion that in a great measure this success was accounted for by the "remarkable powers of memory which frequently enabled them to recollect long passages of the authors they have been studying, whether prose or poetry, and to write them down nearly word for word."

The general character of secondary and higher education that prevailed in this epoch is certainly favourable to the students, as is seen from the testimony of acute observers like Sir Charles Trevelyan, Governor of Madras (1859-60) and Finance Member of the Govern-ment of India (1863-65) Sir Henry Maine; and the Rev. J. C. Marshman, who was one of the founders of the Serampore College and who greatly influenced the Education De-spatch of 1854. The chief institutions that represented higher education then were the Bengal Colleges, including the Madrassa, the Sanskrit and the Hindu Colleges at Calcutta; the "University" Institution of Madras; the Elphinstone Institution of Bombay; the Zillah Schools of Bengal and the North-West Provinces and the Provincial Schools of

Bombay. In these schools generally and certainly in the Madras College the education imparted was chiefly literary, but included elements of Physical Science and Mathematics. The scheme for senior scholarships, at least in Bengal, included such subjects as Differential and Integral Calculus, Optics and Hydrostatics. Generally speaking, in all these institutions Hume, Gibbon, Thirlwall and James Mill were read in History; Reid, Abercrombie, Browne, Stewart, Mill and Whately were read in Political Philosophy; Adam Smith in Political Economy; Milton, Bacon, Shakespeare and Hallam in Literature and the History of Literature; while Mathematics study included Laplace's *Mechanique Céleste*.* The only serious fault that could be picked with the system was that while recognised authorities were not neglected, "science was not practically taught;" and in other subjects while a fair amount of knowledge was acquired, "there were no opportunities for original work nor was the education given of a kind likely to lead to original work;" and above all the range of examination to which the candidates were subjected was "too wide to render it possible for details to be thoroughly known or to permit reading outside the set books."† Lastly the papers set by the examiners seem to have the appearance of having been "set on lectures and books, rather than on subjects."

Vernacular instruction does not appear to have prospered well. The Vernacular Department of the University did *not* work satisfactorily. Tamil, Telugu and Marathi were only taught superficially. The main object which both Government and the Court of Directors had in view, *viz.*, that of creating a good class of vernacular linguists who might serve as vernacular teachers in schools, and as writers and translators of useful books and "communicate to the native literature and to the minds of the native community that improved spirit, which it is to be hoped, they will themselves have imbibed from the influence of European ideas and sentiments"—was not realised. Great difficulty was experienced in securing competent vernacular teachers who were acquainted with a sufficient knowledge of English.

The University Board encouraged translation from, and to, English, awarded an annual prize for the best vernacular exposition of a portion of a standard English author, aimed at the publication of an improved series of vernacular books and were fully sensible of the poverty of vernacular literature to suit the needs of the times. They were aware of the difficulty of translating satisfactorily from scientific and philosophical works and reported that "only those English works which deal in simple narrative, in which little occasion arises for the use of abstract terms, which relate palpable occurrences, sometimes surprising, somtimes interesting to the feelings, sometimes ludicrous, appear to admit of efficient translations." *

In fact the Board was convinced that under the circumstances the best course to encourage was that of "a full and free exposition, rather than a translation of all the subject-matter contained in any English work, by the assistance of, or entirely by, such natives as have attained a full comprehension of the subject-matter and also a proficiency in the English language."

*F. W. Thomas: *History and Prospects of British Education in India*. 1891, p. 55.
† F. W. Thomas, p. 55.

* Satthianadhan, p. 87.

In fact in the half-a-century closing with 1854, the main Oriental Colleges maintained by Government (the Calcutta Madrassah founded by Warren Hastings in 1781; the Sanskrit College at Benares founded by Jonathan Duncan in 1791; and the Sanskrit College at Calcutta started by Lord Amherst in 1824) were not well managed. Though English was taught in them not infrequently, the methods and courses were yet largely old-fashioned and indigenous; and the system "seems to have possessed all the imperfections without the advantages of native education which the Pundits were wont gratuitously to impart to their small classes." The whole period was occupied with conflicting notions as to the benefits of a purely Oriental curriculum and with the great controversy between the Orientalists and the Anglicists. Men like Lord Moira (the Marquis of Hastings) were doubtful as to the wisdom of the cultivation of the ancient Sanskrit learning; while on the other side were ranged powerful advocates like H. T. Colebrooke, H. H. Wilson, Sir J. Harington and J. C. Marshman.* We hear complaints made from time to time in the Calcutta Madrassah as to how the discipline was loose and unsatisfactory and how the English section of the school was filled with unwilling pupils who devoted too short a time to the study of that language.†

In 1854, on the eve of the great Education Despatch, the situation was as follows in Madras. The Government University (*i.e.* the High School and the College recently started) was turning out fairly satisfactory results. There were besides Provincial Government Schools at Rajahmundry and at Cuddalore and a few Elementary Schools supported by private subscriptions. Missionary efforts played a prominent part; and the S. P. G. alone supported no less than 186 schools with over 5,000 scholars inclusive of nearly 30 per cent. girls, scattered mainly in the districts of Tinnevelly, Madura, Trichinopoly and Tanjore. The Church Missionary Society was equally active in the Tinnevelly District. The total number of Mission schools and of the pupils in these exceeded those in all other parts of British India put together. Missionary operations were not confined to elementary education alone. The exact proportion of primary to secondary pupils in Mission Schools was 100 to 15 according to Sir Charles Trevelyan, writing in 1852. Of higher grade institutions, they had the General Assembly's School started by the Church of Scotland Missionary, John Anderson, in 1837, which soon proved a great success and led to the opening of branch schools at Conjeevaram, Nellore, Chingleput and Triplicane. In that institution which was strengthened by the addition of two other eminent teachers, Robert Johnstone and John Braidwood, were taught English, including Reading, Grammar and Composition; Writing and Accounts; History, Geography, Arithmetic and Algebra, the Elements of Astronomy and Political Economy, Logic, Moral Philosophy and Natural Theology; and the evidences and doctrine of Christianity. The most important charitable non-missionary school during this period was Pachaiyappa's Central Institution founded in 1841-42 which at first *gratuitously* imparted education to the poorer classes of the native community in the elementary branches of English

* Adams: *Report on Vernacular Education*. pp. 310-11, and *The Calcutta University Commission Report*. Vol II—(Part I, Chap XVI), pp. 81 *et seq.*

† *Calcutta University Com. Report*. Vol II, pp. 110-11.

Literature and Science coupled with instruction in Tamil and Telugu; and it thus served as a feeder to the High School of the "University." The Trustees of Pachaiyappa's Charities founded endowments in the High School with a view to the providing of education in the higher branches of literature and science to their own pupils who were in poor circumstances and were deserving of higher encouragement. Those that enjoyed the benefits of these endowments were divided into two classes called respectively Pachaiyappa's Free and Endowed scholars. Besides this, the Trustees established two branch schools at Conjeevaram (1846) and at Chidambaram (1850) and gave great aid to certain vernacular institutions in and about Madras.

II. THE DESPATCH OF 1854 AND AFTER.

The Despatch of 1854 marks a momentous epoch in the history of modern Indian education. It has been described as "the Magna Charta of English Education in India" and "as the Intellectual Charter of India." The Despatch, dated 19th of July 1854, was issued by the Court of Directors and was very lengthy containing as many as a hundred paragraphs. In his Minute on the Despatch, Lord Dalhousie declared that it contained "a scheme of education for all India, far wider and more comprehensive than the Local or Supreme Government could ever have ventured to suggest." The Despatch embraced within its scope vernacular schools throughout the districts; the improvement and wider extension of education, both European and Vernacular; the constitution of a separate Department of Education in all the Local Governments; the starting of Universities at the three Presidencies,; to which all educational institutions supported by the Government or by private effort might be affiliated; and "above all the glorious measure of grants-in-aid to all schools without reference to caste or creed."* The Despatch directed the attention of Government to the importance of placing "the means of acquiring useful and practical knowledge within the reach of the great mass of the people." It declared that English was to be the medium of instruction in the higher branches and the vernacular in the lower; English was to be taught wherever there was a demand for it; but it was "not to be substituted for the vernacular languages of the country." Government institutions were not to be founded in places where a sufficient number of institutions already existed and were capable with Government aid of meeting the local demand. Scholarships were to be instituted so as to connect lower schools with higher ones and higher schools with colleges. Female education was to be frankly and cordially supported by Government. The chief officials in every district were required to aid in the spread of education; and in making appointments both high and low, an educated person was always to be preferred to one who was not. The system of grants-in-aid was to be based on the principle of perfect religious neutrality; aid was to be given to all schools imparting a good *secular* education provided they had a permanence, were under adequate local management and were subject to Government inspection and provided also that some fee, however small, was charged in them. Lastly the Despatch declared that "the discontinuance of any general system of education entirely provided by Government is anticipated with the gradual advance of the system of grants-in-aid; but the progress of education is not to be checked in the slightest degree by the abandonment of a single school to probable decay."

* S. Satthianadhan, p. 41.
J. A. Richey: *Selections from Educational Records*, Part II, pp. 364—393.
J. C. Marshman: *History of India*—Part II, p. 776.
F. W. Thomas: *British Education in India*, p. 61.

Already even before this Despatch, on the eve of the renewal of the Company's Charter in 1853, the Committee of the House of Lords had discussed the important question of Indian education, taking evidence from such distinguished authorities as Dr. Wilson, Dr. Duff, George Norton, J. C. Marshman and C. H. Cameron. The Committee dealt with such important topics as (1) the irritating subject of religious education, an expression which was then regarded as being synonymous with the use of the Bible as a regular text-book, a question which was brought into great prominence by the Church Missionary Society; (2) the establishment of Universities which had been previously urged on the Directors but without effect and which was recently revived by Mr. C. H. Cameron, a past President of the Council of Education in Bengal who presented a memorial to Parliament advocating the founding of a University in each of the three Presidencies; and (3) general elementary education which was advocated by the Committee of Public Instruction at Calcutta more than thirty years before. The question of grants-in-aid was also discussed before the Lords' Committee; and the general results of the evidence taken before it were "compacted and formulated" in the great Despatch.

Lord Dalhousie's Minute on the Despatch submitted to his Council contained the measures which seemed to him to be best calculated to give effect to the views of the Directors. The Despatch itself authorised the Governments of Madras and Bombay to start the organisation of the new Departments of Education and report their measures to the Government of India only for approval and sanction. The Madras Government at first proposed the appointment of a Secretary to Government in the Educational Department, of an Under-Secretary, of six Inspectors of Schools and of other minor officers. The Governor-General was of the opinion that the creation of a Secretary to Government was "uncalled for and inexpedient" and that in Madras, as in other provinces "the Department will be managed with thorough efficiency by a Director of Public Instruction as suggested in the 6th paragraph of this (Dalhousie's) Minute" and also that "the number of Inspectors proposed seems large." Ultimately a Director of Public Instruction, 4 Principal Inspectors of Schools, 20 Zillah Visitors and 60 Sub-Assistant Inspectors were sanctioned. The first Director was Mr. (afterwards Sir) A. J. Arbuthnot.

Dr. Satthianadhan has very clearly and succinctly enumerated the first fruitful labours of the new Director and his Department. Among these were included (1) the reorganisation of the "Madras University" into the Presidency College with a Law Department attached to it, (2) the establishment of a Normal School in 1855-56 to provide teachers for employment in the Anglo-Vernacular Schools and the Elementary Vernacular Training Schools, (3) the development of Provincial Schools which were already working at Kumbakonam, Rajahmundry, Calicut and Bellary; and the starting of Zillah Schools at a few district centres like Chittore, Salem, Madura and Berhampore, where the standard of instruction was not as

high as in the Provincial Schools, (4) the opening of a series of Vernacular Taluk Schools whose chief object was to be the extension and improvement of vernacular education and which were to be the models of what vernacular schools ought to be; and (5) the extension of measures for the promotion of education in the District of Rajahmundry and for the improvement of the Khonds and other tribes in the hill tracts of Ganjam.

More important than these achievements was the introduction of the grant-in-aid system. Government published certain provisional rules relating to the sanction of grants in August 1855; and grants-in-aid were first given for the year 1856-57. The provisional rules of 1855 were found unsatisfactory aud a revised set of rules were published in September 1856 as the Educational Notification of 26th August, 1856,* by Mr. A. J. Arbuthnot. The provisional rules of 1855 were drawn up with the specific objects of aiding the erection, enlargement and repair of school-buildings; the provision of school furniture; the increase of the salaries of teachers and the provision of additional teachers; and the provision of stipends to pupil-teachers and of school-books, maps and school apparatus. Grants were also given in aid of scholarships and stipends for normal students and all grants were subjected to certain conditions of inspection, regulation, etc. The first important grant-in-aid was a building grant of Rs. 7,000 to the Harris School which was recently closed down. This school was started in 1857 and originated from a legacy of £1,500 left by Miss Sybilla Harris which was handed over to the Church Missionary Society for the erection of a school for Muhammadan youths.

The Grant-in-Aid Rules of 1855 were found defective as they did not exactly specify by what considerations the amount of the grant was to be determined in each case; nor did they define what qualifications should be deemed essential and what deficiencies should be regarded to be a bar to the sanction of any grant at all. New rules were indeed promulgated in 1856; but the enforcement of these in the case of schools which were in receipt of grants under the former rules was postponed until 1858. These new rules greatly elaborated the conditions under which grants could be given. Great importance was laid on grants-in-aid of the salaries of masters and mistresses who had to acquire certificates of qualifications signed by the Director, given partly as the result of an examination and partly on the reports of the Inspectors of Schools. Certificates of male teachers were of nine grades and entitled the holders to grants ranging from Rs. 800 to Rs. 40 annually. Certificates of school mistresses were of five grades entitling them to grants ranging from Rs. 180 to Rs. 40. The stipends to pupil-teachers were also defined and graded; and elaborate rules were devised for grants for the provision of school books, maps, etc., as well as for buildings and libraries; while all applications for grants to industrial schools and for other purposes were to be disposed of on their own merits. These rules, in particular to those applying to salary-grants, had an immediate effect in the raising of the qualifications of the teachers and thus added greatly to the efficiency of the schools. The grant-in-aid system had the great advantage of economy since it brought out and extended

* Printed *in extenso* as No. (74) pp. 219-225 of Richey: *Selections from Educational Records*. Part II.

the scope of private agency in the place of the more costly directly-maintained Government schools. It carefully avoided all complicated questions of religious instruction as well as all interference with the educational operations of the Missionaries.

As we saw a little before, Zillah and Taluk Schools were a creation of the Despatch of 1854—the chief difference between the two classes being that in the former English, and in the latter, the Vernacular was the chief medium of instruction. But the authors of the Despatch did not intend to maintain the broad line of separation between the English and the Vernacular schools and thought it desirable to group them together. The two classes afterwards came to be known as High and Middle Schools and are now united under the single heading of Secondary Schools. Besides the Zillah and Taluk Schools started by Government, Protestant Missions like the London Missionary Society, the Church Missionary Society, the American Missionary Society and the Free Church Mission had started a large number of English Elementary Schools and Vernacular Schools in the Northern Sarkars and Nellore. The Free Church Mission was actively at work in the Chingleput District; the S. P. G. and the Wesleyan Mission were very active in Tanjore and Trichinopoly; while the Church Missionary Society and the S. P. G. had done splendid work in Tinnevelly. German Missionaries were active in Malabar and the Roman Catholic Missionaries in Canara; while in the City of Madras itself, the Wesleyan Mission, the London Mission, the Free Church and the Church of Scotland were most active.

The Presidency College as it formally came to be in 1855, continued to be under Mr. E. B. Powell, a Senior Wrangler, who had long been Head Master of the High School; Professors of Law, Vernacular Literature and Mental and Moral Philosophy were also appointed in that year; the College was divided into two departments, the Junior and the Senior; English Literature, History, Mental and Moral Philosophy, Political Economy, Mathematics and Natural Philosophy being taught in the Senior Department, while the Vernacular languages were taught in both. The Law course was to extend over three years. The original scheme for the Presidency College was that it should have consisted of four departments, General, Medical, Legal and Civil Engineering. But the Medical School which was started as early as 1835 and subsequently developed into a College in 1851, could not be amalgamated with the Presidency College, and continued to be separate, though its control was transferred to the Education Department in 1855.

The Revenue Board Survey School which was established early in the century with the the object of training a number of surveyors became the nucleus of the College of Engineering. There were two other professional institutions which came into prominence about the same time. The School of Ordnance Artificers, started by Colonel Maitland in 1840, was now reorganised as a Government institution, chiefly for the benefit of Eurasian youths; and the School of Arts which was first opened in Black Town in 1850 by Dr. Hunter, supplemented by the School of Industry, came also to flourish; and it received marked encouragement in the Despatch of 1854.

The Despatch of 1854 sanctioned the founding of Unive ities on the model of the

University of London. The standard required for a degree was to be "such as to command respect without discouraging the efforts of deserving students;" while care was to be taken to maintain such a standard for Honours as would afford a guarantee for high ability and valuable attainments; and the subjects for examinations should be so selected as to include the best portions of the different schemes of study pursued in the affiliated institutions. * The Senate should have the control of the funds of the University and of framing regulations for the conduct of examinations, etc. The Despatch also considered it advisable to dispense with the attendance required at the London University for the Matriculation Examination and to substitute some mode of entrance examination which would secure a certain amount of knowledge in the candidates for degrees without making their attendance at the Universities necessary previous to the final examination. The Directors also recommended the institution of professorships in connection with the Universities for delivering lectures in the various branches of learning, especially professorships in law and civil engineering. The Senates of the three proposed Universities were to consist of members so selected as to represent the different systems of education prevailing in the affiliated institutions, including natives of India of all religious persuasions. Candidates for the degrees were to be usually supplied by the affiliated colleges which should be capable of supplying a sufficiently high order of instruction in the different branches of arts and science.

The University of Madras was incorporated by an Act of the Legislative Council of India, dated 5th September 1857, the very year of the Mutiny. The Senate was appointed in March 1857; the regulations and bye-laws were drawn up in 1857-58. There were four faculties or branches of knowledge, Arts, Law, Medicine and Civil Engineering; and the plan of affiliation was encouraging greatly. There were two examinations in Arts; the Entrance and the B. A., for the latter of which there were four compulsory, and one optional, subjects. The regulations in the Faculties of Law and Medicine were based on those which were adopted at the Calcutta University. There were two degrees in Civil Engineering. The first Entrance Examination was held in September 1857; and 36 out of 41 candidates came out successful. The first B. A. Examination was held in February 1858, at which two candidates presented themselves and passed, both coming from the American Mission Seminary, Jaffna. The value of the degrees conferred by the University was much the same as that of those conferred by its sister Universities and by the University of London. In estimating the value of the University in its first years of work we should not lose sight of its original aim. What the University did was only "to consolidate the education going on throughout the province, to provide examinations requiring a considerable degree of knowledge thoroughly assimilated and to recognise its possession by a degree." And as Mr. F. W. Thomas says—"If we look for a zeal for knowledge and a life-long devotion to its acquisition, we shall have recourse, not to the *alumni* of the modern Universities, but to the few remaining representatives of the ancient Hindu learning, the Pandits to whose mistaken devotion their sacred learning is the keystone of their religion" We may not agree with the last part of the sentence; but Pandit-learning had its own special merits which our University culture, at least in the first decades of its life, did not produce.

(To be continued).

* Para. 29 of the Despatch.

THE TWELFTH INDIAN SCIENCE CONGRESS

BY

MESSRS. N. L. SHARMA, M.Sc.

AND

S. P. CHATTERJI, B.Sc.

THE Benares session of the Congress has been a record session this year. It was attended by about 300 members, and more than 400 papers were submitted to it. The President and many of the eminent members of the Science Congress have written letters to the Hony. Local Secretaries expressing great satisfaction at the excellent arrangements made by them for the members of the Congress. Indeed, Professors L. D. Coneslant and K. K. Mathur deserve the highest praise for the untiring zeal and enthusiasm with which they worked for the success of this session. In addition to the popular lectures on scientific subjects delivered by eminent scientists, one function deserves special mention. The Benares Hindu University Science and Engineering Colleges celebrated their annual function, *viz.*, the Science dinner at the most appropriate time when all the leading scientists of India could grace the occasion by their presence. Under a big 'Shamiana' artistically decorated, exhibiting on bamboo supports pictures of eminent scientists of the world and lighted with innumerable electric lights, sat over 800 guests to a banquet, in which only Indian dishes were supplied. There were amongst the guests about a dozen European and about 200 Indian members of the Science Congress coming from different parts of the country.

Dr. S. S. Bhatnagar, University Professor of Chemistry in the Hindu University, had composed on the occasion of a previous year's dinner a Hindi song—now accepted by the Hindu University staff and students as their *Alma Mater* song. It was sung in a chorus, and the pictures of the various saints and great men mentioned in that song were shown by lantern slides. It will be of interest to the readers to give an English rendering of this song by Prof. P. Seshadri of the Hindu University:—

Our Alma Mater.

Sweet and delightful,
Splendidly beautiful,
Is this our Alma Mater,
The seat of all learning.

Seated on the lovely banks of the Ganges
This Kashi is above of the three worlds,
The storehouse of Wisdom, Piety and Truth
This is the seat of all learning.

These bricks and stones are new,
But reshaped by Vishwakarma himself,
Into beautiful temples of learning.
This is the seat of all learning.

This the sacred teaching of this place,
Truth first and self-interest next—
For this Harishchandra sold himself.
This is the Seat of Truth.

The Vedas which are the true voice of God
By reading which one becomes illumined faith
Were composed by Vyasa here—
This is the Seat of the Vedas.

Those bringers of heavenly bliss,
Guides along the true path,
Buddha and Sankara lived and throve here—
This is the seat of all spiritual learning.

The delightful streams of Varuna and Assi
In which Kabir and Tulsi Das have bathed,
Why will they not be a mine of poetry?
This is the seat of all song.

Various Arts and Sciences are here,
The Science of Wealth and of Song,
Of numbers, the earth and of herbs and the elements,
Here is the lovely mixing of East and West—
This is the seat of all learning.

Kashi has reappeared in new glory,
Shaped by the love of the motherland
The zeal and power of Malaviya,
This is the seat of heroes of action.

The President of the Science Congress gave a very interesting and humorous after-dinner speech in which he described the impressions which Kashi and its great centre of learning, *viz.*, the Hindu University, had made over his mind.

SECTION OF ANTHROPOLOGY.

President :—PROF. P. C. MAHALANOBIS.

The President delivered his presidential address on "Race Mixture in Bengal." His lecture was illustrated with lantern slides, and included statistical analyses of anthropometric measurements of Indian castes and tribes. He showed that the problem of caste resemblance was much more complex than previous workers had assumed. He suggested that each caste in India showed a dual set of affinities, one with other local castes of different social status and a second series of affinity with castes of other provinces of the same social status. After a brief discussion of older theories, he gave a provisional description of racial affinities and tendencies based on available anthropometric evidence. Prof. Mahalanobis also considered the Anglo-Indian question and discussed the racial position of the Anglo-Indian group with reference to Indian castes and tribes.

Several extremely interesting papers were read in this section. Prof. P. Sampat Iyengar, of the Mysore University, read an extremely interesting paper on certain recent Palloliths found by him at Biligere, Tiptur Taluk in Mysore. The author exhibited more than 40 typical specimens of (1) hammer-stones, (2) combination types of scrapers and sword, (3) borers, (4) saws, (5) chisels—all of which showed numerous clever hand grasp designs suited to the purpose for which each tool was intended to be used. There were a few specimens of left-handed designs also. The great importance of the present finds lies in the fact that it is the first factory to be discovered in Southern India.

Another interesting paper was contributed by Mr. Dhirendra Nath Mazomdar on the religion of the Kols which was based on his own observations. The author gave an account of the chief "Bongas" (spirits of good and evil), and described in details the various festivals of the Kols, *e.g.*, the "Maghe" (winter), the "Ba" (spring), the "Dessauli Bonga" (hero-worship), and the "Jamnama" (harvesting) festivals.

Prof. Hem Chandra Das Gupta of Calcutta read an interesting paper on a few types of sedentary games prevalent in the Central Provinces. The President announced the formation of a Committee consisting of himself (Chairman), Rao Bahadur Ananthakrishna Iyer, Rai Bahadur S. C. Ray and Mr D. N. Mazomdar (Secretary) to draw up and incorporate in the proceedings of this section a set of standard conventions and procedure for the guidance of anthropometric observers and workers in India.

SECTION OF MEDICAL RESEARCH.

President :—LT.-COL. F. P. MACKIE, O.B.E., M.D., M.Sc., F.R.C.S., F.R.C.P., I.M.S., *Director, Bacteriological Laboratory, Bombay.*

The President in his most learned and interesting speech mentioned the nature of the diseases caused by insects, and gave an idea of the high mortality due to them. He stated that deaths and invalidity caused in India by diseases known to have been caused by insects, and the proportion of diseases in which insects played a contributory part are enough to stagger humanity. He said insect-borne disease was an enormous burden on the financial, economic and social conditions of the Indian people. India like other Eastern countries was awaking from the long slumber, and the immense fatality from preventible disease was one of the most important problems she had to face. He added if they rid India of these insect-borne diseases, they would go far to bring her mortality into a line with that of temperate countries.

After emphasising the importance of preventive as compared with curative medicine, Lt.-Col. Mackie urged an expenditure of at least a part of the available money for medical purposes on preventive measures. He said, "Lowering of the death-rate, especially of the infantile death-rate, increased expectation of life and general increase of healthiness—such as have been brought about during the last half a century in the countries of the West—have been caused not so much by the success of curative medicine, but almost entirely by triumph of prevention. One of the most amazingly retrograde steps which has resulted from our recently-acquired methods of legislation is the demand from one province after another for the abolition of Public Health Commissioners, and a weakening of the services they control. That politicians should be found so short-sighted as to try to weaken the very organization on which the whole health and future depends, causes one almost to lose faith in the future of human progress." The President further added that if adequate measures are to be taken to deal effectively with the vast subject of preventible disease, it must be by strengthening and not by weakening the public health services. We look, and we believe not in vain, to the Supreme Government to stand against this rising tide of ignorance and prejudice. Lt.-Col. Mackie said with great emphasis that it is their duty when the time comes to hand over the government of this country to its own population to see that they leave it with a strong, well-organised and efficient public health service, and that, he believes, is the greatest boon which the Western medical science can confer.

The President further said: "If the exponents of medical practice in India decide to revert to those ancient shibboleths of creed outworn, which we know as indigenous systems, and to return to the golden age of the Rishis, I think it will do less harm than the disastrous state of affairs which will result if the modern principles of hygiene and sanitation are allowed to wither away and to pass into forgetfulness."

Dealing with the subject of research in tropical diseases, the President urged for closer co-operation between the medical research department and the public health services.

In this section several papers of academic interest were read and discussed, and a resolution was passed to the effect that members of the Medical Research Section of the Science Congress were of opinion that in view of the vast amount of epidemic and endemic parasite disease in India, the Government of India and the Local Governments should be urged to enlarge and strengthen the public health and research departments throughout the country, with a view to reducing the enormous amount of invalidity and death-rate resulting from preventible disease.

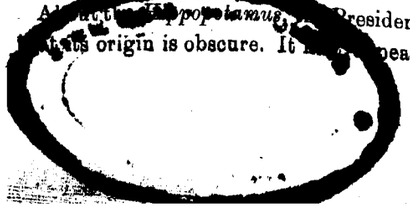
SECTION OF GEOLOGY.

President :—DR. G. E. PILGRIM, D.Sc., F.G.S., *Superintendent, Geological Survey of India.*

The sessions were attended by some of the leading geologists of India among whom may

be mentioned Dr. Pascoe (Director, G.S.I.), Prof. D. N. Wadia (G.S.I.), Prof. Das Gupta (Calcutta Presidency College), Prof. Sampat Iyengar (Mysore University), Mr. Rama Rao (Mysore Geological Survey), Lt. Davies (Kohat), Dr. Dudley Stamp (Rangoon University), and Prof. N. P. Gandhi and Prof. K. K. Mathur (Benares Hindu University).

The President gave a very learned and interesting speech on "The Past History and Migrations of Indian Mammals." Speaking of the Himalayan range, which began to be elevated in the Eocene age, as a formidable barrier to the free migration of mammals between India and Central Asia, he said: "There was a much easier line of communication between India and Africa," the existence of a land-bridge, which has only quite recently been submerged, across the entrance of the Persian Gulf, can be proved, not only by the character of the rocks on either side of Hormuz Straits, but also by the drowned river valleys traced by modern soundings. This route, during the Tertiary, must have been through a well-watered country, most unlike the Arabian deserts of to-day." The President then traced the migrations of *pigs* to India during the Lower Miocene. 'At this period the marshy habitat favoured by the pigs was completely occupied by another family, now extinct, known as the Anthracotheras. They resembled the pigs in general shape, but differed much in their tooth structure. With them the true pigs were unable to compete in the struggle for existence. In the Middle Eocene, however, when the Anthracotheras began to wane, the pigs began to arrive in India in great numbers.'



A[illegible] *Hippopotamus* President said [illegible]'s origin is obscure. It [illegible] peared in the Lower Pliocene of India, but was a migrant from some country unknown. It may have existed in India within traditional human memory, the "jala hasti" (water-elephant) of Sanskrit literature being probably this animal.

Dr. Pilgrim then traced the origin of the camels and the horses. *Camels* are certainly a North American group, their ancestors having been found as far back as the Eocene. During the Upper Pliocene, they migrated from Central Asia to India, but never reached Europe. The early *horses* are equally of North American origin, but the development of the three-toed horse *Hipparian* and of the modern one-toed *Equus* is believed to have taken place in Central Asia. Thence both genera migrated to India.

The Primate family seems to have originated in North America, whence their most primitive members, the *Lemurs*, migrated to other parts of the world. The earliest *Anthropoid ape* has been found in the Lower Oligocene of Egypt, but the abundance of Anthropoid material in India has suggested to some that the evolutionary centre may have shifted to India. The earliest known *claimant to human ancestory* existed in the oriental region as the Javan *Pithecanthropus*. The evidence is, however, insufficient as yet to enable us to say what was the original home of the human species.

Dr. Pilgrim said that in the case of the *Rhinoceros* family, wave after wave of migration spread from North America. One of its most curious types was found fossil in Baluchistan, whence it received its name of Baluchitherium. This was larger than an elephant and possessed a skull 5 feet long.

From one of the genera of Antelopes more or less allied to the modern *Nilgai* the oxen

arose. Numerous intermediate forms existed in India, some of which migrated to Europe and elsewhere. Succeeding waves of migration are no doubt responsible for the *oxen* of the world. The domestic humped ox of India is clearly an introduction by man in Neolithic or even later times. This is suggested by recent finds in the Punjab by the Archaeological Department of seals dating back, it is believed, some five thousand years ago, which contain representatives of an ox—not a humped one, but related to the wild gaur.

In conclusion, Dr. Pilgrim emphasized how imperfect our knowledge of fossil mammals still is, and how rich a field for research is afforded by those of India.

There were several important papers contributed in this section by various eminent geologists, the names of some of whom have been given above. Prof. K. K. Mathur's paper on "The Igneous Rocks of the Girnar Hills (Kathiawar)" was one of the most important contribution to the Indian Petrology. He had prepared a geological map of the area and had examined all the rock-types of its central mass. He was congratulated for this important work by all the geologists present, including the President himself.

SECTION OF BOTANY.

President:—Mr. R. S. INAMDAR, B. A., B. AG.

This section was a very successful section of the Science Congress this year. It was presided over by Prof. Inamdar of the Benares Hindu University and attended by most of the leading Botanists of India, among whom may be mentioned Mr. and Mrs. Howard, Dr. Sahni, Dr. Agharkar and Prof. Kashyap.

The subject of Prof. Inamdar's address was "The Auto-Regulation of Physiological Processes in Plants." He said that the extreme complexity of physiological reactions introduce apparent deviations in the living phenomena from the ordinary laws of Physics and Chemistry. After a detailed consideration of many physiological processes he showed the untenability of the law of product recently put forward by the renowned Botanist, Sir Jagadish Chandra Bose. From his experiments on transpiration and other metabolic processes in plants conducted at the Benares Hindu University, he expressed the belief that all regulatory phenomena are automatic in plants and can be explained on purely mechanistic grounds. The inter-connection that exists between various physiological reactions taking place in the wonderful laboratory of the living cell was specially emphasised and it was indicated that the purpose of all this regulation is to produce a specific maximum growth (including reproduction of this kind). Growth itself was conceived by him as an integrated summation of all the metabolic activities. He deplored our lack of knowledge of the energy relationships of the plant and emphasised that we must view the living organisms not merely as living machines but as varying systems of physical and chemical reactions to which laws of thermo-dynamics may be applicable.

He further went on to indicate the theoretical and practical importance of the subject and impressed upon the minds of the audience the necessity to pursue the subject in all aspects in the tropics where it has been totally neglected.

There was a record number of papers contributed this year embodying various branches of Botany. Many papers were contributed on the physiological side by the members of the Benares Hindu University, of

which special mention may be made of Mr. Bhola Nath Singh's paper on the 'Respiration of leaves.'

On the plant-pathological side, Dr. K. C. Mehta of Agra has made a study of the incidence of wheat rusts and his researches may throw a flood of light on the obscure problem of the source of infection by these fungi.

Mr. Bhide of the Poona Agricultural College gave an account of a satisfactory process in the hybridisation of rice.

Prof. Ayengar of the Presidency College, Madras, contributed an illustrated account of his valuable collection of the marine algæ.

On the morphological side a large number of papers came from Bangalore, Lucknow, Lahore and Benares. Dr. Sahni of Lucknow has undertaken the study of the morphology of some rare gymnosperma.

Dr. Agarkar (Calcutta University) gave an account of the tours in the Eastern Nepal which he has visited twice during the last four years. His studies fill a gap in our knowledge of the Himalayan vegetation.

Of the remaining papers that were read, mention may be made of Mr. Tiwary's paper on Polyembryony in Eugenia Jambolana, Mr. Bharadwaja's paper on a new species of Campylonema, and Mr. Mehta's paper on the root fasciation in Asphodelus.

SECTION OF AGRICULTURE.

President:—Mr. R. S. FINLOW, B.Sc., F.I.C.

The subject of the President's speech was the review of work which has been done and of the progress which is being made in the improvement of Indian Agriculture. He said that research and then demonstration must precede propaganda and as this fact was not realised till the present century, progress was very slow in the later half of the nineteenth century. He then quoted few lines from the speech of His Excellency Lord Ronaldshay, late Governor of Bengal, to support his point. He reminded that the splendid work of the plant-breeder received first recognition in the year 1910 from the cultivator. But he deplored the fact that though the present area under improved crops is a large one, it forms only a small proportion of the whole cultivated area.

He then tried to find out reasons why other phases of farming recommended by the Agricultural Department, as for instance, the application of bone meal as a manure for transplanted paddy on red soils, and the use of lime and potash for jute on high lands, have not been applied on a really large scale by the cultivator. The chief reason, according to him, is the poverty of the cultivator. The rayats in India are generally poor and thus cannot afford to buy artificial manures or implements which means the spending of ready money. He strongly urged that the rayats should be financially helped by the Government direct either through Co-operative Banks or through some such organisations. He further said that substantial progress in proper manuring, good tillage, and good agricultural practice, should be made at the earliest possible moment.

He then dealt with another aspect of the necessity for proper treatment of the soil. According to him, plant diseases can be eliminated in some cases by special manuring and in others by tillage, drainage, etc., *i.e.*, by good cultivation. He arrived at this conclusion from the facts that (1) *Rhizoctonia* in jute is definitely connected with lack of available potash, (2) the application of sodium sulphate in the soil cures jute from the disease caused by the attack of *Diplodia Chorchori*, (3) non-potash plots are much more liable to attack from a small white sucking insect than plots which had received potash salts, (4) mosquito blight may be cured by direct inoculation of the tea bush with potash, this has been proved by recent researches, done by the members of the Indian Tea Association Research Station, Assam, and (5) it has been established that good cultivation of the soil of the mango grove is a very effective remedial measure to protect mangoes from the damages done by the pest. He finally concluded that we should not only see that the resulting crops will be bigger, but also that, being healthy, they will be more capable of resisting disease, and thus less subject to that toll of loss which is by no means negligible and which means so much less food for the teeming millions in this great country. He ended his address by quoting the following paragraph from the "Review of Agricultural Operations in India, 1922-23:"

"The very success of the plant-breeding operations has, however, overshadowed other and no less important factors in crop production, such as cultural methods and the maintenance of the fertility of soil. A knowledge of the relations between soils and plants, under the varying conditions of the country, is essential for a proper understanding of the agricultural situation, and the development of this side of agricultural work in India is of first rate importance. Land improvement will no doubt be a matter of slower growth than crop improvement, as capital or credit will have to be forthcoming for its fulfilment, but there is ample evidence in more than one province that co-operative effort will remove most, if not all, of the difficulties which are likely to be encountered."

SECTION OF CHEMISTRY.

President:—PROF. J. C. GHOSH, D. Sc.

In the past, the Presidents of this section chose for their addresses topics of general scientific interest and organisation. This year, Dr. Ghosh departed from that precedent and spoke on modern theoretical developments in Photo-Chemistry—a branch of Chemistry in which he has been interested for some time. He defined this branch of Photo-Chemistry as one which deals with those groups of allied phenomena where radiant energy is transformed into chemical energy, and *vice versa*. He classified the photo-chemical reactions from the standpoint of thermo-dynamics into two divisions:

(1) Reactions where the end products have greater energy than the reacting substances, where the energy of radiation is locked up in the interior of the molecule, as the chemical energy of transformation.

(2) Reactions in which the end products have less energy than the reacting substances and light acts only as a stimulus which explodes this store-house of energy.

The President then described the inner mechanism of photo-chemical reactions and explained the various theories of the photo-chemical reactions which are too technical to be of general interest.

Of all the sections, this Chemistry section had the largest contribution of papers. The total number of papers was 108. As many as 25 papers were contributed by Dr. S. S. Bhatnagar and his pupils. Dr. Bhatnagar has joined the Punjab University, but his love for

the Benares Hindu University remains the same, and he is still an Honorary University Professor there. He has got a special interest in Colloidal Chemistry, and he was responsible for many of the papers contributed to the section of Chemistry on this subject. His paper on the 'Protection and Precipitation of Clouds,' in which he had studied the effect of the various vapours, smokes and fumes on the rate of settling of clouds prepared artificially in the laboratory, was very interesting.

There were several papers on the Liesegang phenomena and the development of concentric rings in beet-root, agate and the wings of butterflies. A fairly large number of papers were also contributed in Organic Chemistry and Industrial Chemistry.

THE DISTRICT EDUCATION COUNCILS AND HOW TO IMPROVE THEM

BY

Mr. T. TIRUMALA RAO NAIDU, B.A., L.T.,

Dy. Inspector of Schools, Guntur South Range.

THE Elementary Education Act of 1920 brought into existence the District Educational Councils in the year 1921, with a view to centralise all educational activities in the District and bring them under the control of one central, responsible and popular authority. Now that these Councils have had only about 4 years of existence, let us see how far that object has been realized and, if not realized, what impediment came in the way of the Councils doing all that was expected of them, by the legislature.

The Educational Councils, in their first term of 3 years, were hardly able to realize their exact position in the District, as an educational power and in the first two or three years, they could practically do nothing more than the distribution of teaching grants to all the different Aided Elementary schools in the District out of the Provincial subsidy placed at their disposal by the Government, and the according of sanctions of recognitions and transfers of managements to schools. With the very scanty and limited office establishments given to the Councils, owing to the retrenchment policy pursued by the Government for the last 2 or 3 years, and with the rather indefinite powers placed in their hands for effective control over Elementary Education imparted in Local and Municipal Board Schools in the District, and also with the want of a perfectly cheerful and uniformly willing co-operation between the Taluq Boards and Municipal Councils in

their educational activities on the one hand, and the District Educational Councils on the other, the Councils have unfortunately been thoroughly handicapped in the carrying out of their programmes of other and original work set before themselves, and hence, they have been successful only to a very small and inappreciable extent in that direction.

Though the District Educational Council is a District body entrusted with heavy and responsible work almost equal to that of a District Board or a District Educational Office, the Government were pleased to give only a small office establishment of one clerk and one typist, and with this meagre establishment, the Council could only with difficulty, attend to its heavy routine of teaching grant bills, recognitions and transfers of management and other connected work. It found hardly any time left for its special work of carrying out programmes, regarding expansion and extension of Elementary Education in the District. Secondly, although the Taluq Boards and Municipal Councils in the District are also independent popular bodies, charged with the educational and other activities in different local areas, the Elementary Education Act of 1920 apparently had in view, to gradually bring under the uniform control of this central educational body, only to expand and extend Elementary Education in all the villages on certain definite and well-laid-out lines. But, in the actual working, several instances of a seeming conflict of authority have arisen, owing to want of expressly clear wording of some sections in the three Acts, namely, the Local Boards, District Municipalities, and Elementary Education Acts. These local bodies being popular and independent in their own way, have naturally shown a certain degree of disinclination and resentment, at being advised and generally guided, at least so far as the educational policy is concerned, and this disinclination and resentment have, therefore, contributed to the non-carrying out of any advice or useful suggestions, occasionally given by the Councils, in the direction of expanding and extending Elementary Education on the lines indicated by the Government, in their several G. O.'s on the subject. Thirdly and lastly, the want of willing co-operation, either expressed or implied, between, at least, some of the local bodies and the Councils in educational matters, has contributed, not a little, to the failure of the spasmodic attempts now and then made by the Councils for expanding Elementary Education.

Thus, it becomes clear from the above paragraphs, that it is not entirely the fault of the District Educational Councils, if they have failed to achieve any good and original work contemplated by the Act during the first 3 or 4 years of their existence. If the Elementary Education Act is so amended in the immediate future, as to remove the actual difficulties and draw-backs enumerated above, then, I am thoroughly convinced that the Councils will be fully enabled to carry out a definite programme of extension and expansion of Elementary Education, in all the villages, paving the way for the ultimate introduction of Free and Compulsory Elementary Education, within the next 4 or 5 years, at the latest, throughout the Presidency.

The public has, recently, been given to understand that the Education Act will be soon amended, with the result that new bodies called Taluq Educational Councils, will soon spring into existence, working in

the place of the District Councils, and aided by School Boards and Supervisors. Let us now examine carefully what would be the actual effects of the proposed amendment of the Act, if carried out, in regard to the spread of Elementary Education. Though the Taluq Educational Council would be a body with a limited jurisdiction and area, and though it may be locally helped by the Village Panchayats, School Boards and Supervisors under their control, still, I very much doubt, if these bodies, namely, Taluq Councils, School Boards and Village Panchayats, could have a competent *personnel*, to do effective and efficient work, that may be expected of them, in view of the actual existing conditions, prevailing in the villages, and in the Taluqs, at present. We know, as a matter of fact, that even a District body like the present District Educational Council has not, generally, a *personnel* of real competence, well versed in educational matters, and thoroughly qualified to guide the educational activities of the District, on sound lines, though these members are elected by the Local Bodies. Such being the case, it is really problematical, as to how a better *personnel*, could be had in the immediate present, on the proposed Taluq Councils or School Boards and Village Panchayats.

In consideration of the abovementioned facts, and difficulties that would necessarily arise, if the proposed amendments are to be entirely carried out, would it not be a more prudent and beneficial course, to get the Act amended, only so far as to have the special impediments indicated above in the present working of the District Educational Councils, removed, and then try the District Councils for another term or two, before any further radical amendment of the Act can be thought of, by way of creating Taluq Educational Councils in their stead ?

GEOGRAPHY IN THE SENIOR STAGE.

By MR. P. C. R. PETER, M.A.
St. Joseph's College, Trichinopoly.

BEFORE this stage is reached, a fair knowledge is gained of people all over the globe, their life and occupation, habits and customs and their adaptation to the natural environment. How climate affects plant life and plant life in its turn affects human life is studied and examined. Regions are grouped together on the bases of climate, vegetation and occupation, they are compared with regions differing from them in natural vegetation and human life as well as in cultivated products, natural and imported, and the old inhabitants and the new settlers thereof. Special peculiarities within the same region are studied and a search is instituted for the presence of these peculiarities in other allied regions and explanations offered for the same. Thus casual connection is established among several natural phenomena themselves and also between the natural phenomena and the life and occupation of the human beings on earth.

Geography in the senior stage not only continues the work of the two lower stages in more minute details but also has some more important functions to perform. It has to deal with man's conquest of nature, how man has risen above his environment in certain cases, how he has overcome barriers of natural difficulties by superior intelligence, how he has harnessed the powers of nature and utilizes them to subserve his ends, how this work of subjugation continues, all over the globe, how new means of subduing nature are being forged and also how unconquerable nature is in a good many cases, how utterly futile his efforts to subdue her, how limited

the possibilities of ever-growing conquest and especially how, sooner or later, she will revenge herself on man for all his encroachments and outrages.

Further, from the adaptation of man's life to his environment the student must pass on to study the economic present and future of his nation. The inter-dependence of nations is one of the most important teachings of Geography but there are limits to this dependence. A study of one's own country in its productive aspect as well as in its commercial, is well worth the attention of the student. How far it is advisable for a country to be purely agricultural, how far to be purely manufacturing, how far to be dependent on other countries for one's food and clothing, are items deserving of careful study and research. A study of improvements in the cultivation of land, in the making of one's own necessaries and even luxuries is the point to which Geography leads its students. Statistics of production and consumption, imports and exports, internal and external trade are all important for the students of this stage and no one is a true student of Geography who fails to reach impartial conclusions on this matter of the economic state of one's own land.

A study of the economic conditions of the world naturally leads to the study of international activities, commercial and political. A slight change in the commercial policy of a nation will upset the economic standing of many others and international diplomacy is not a little concerned with the trend of commercial developments. The commercial position of England and other European nations should be carefully studied in their relation to India and the Colonies. The industrial progress of Japan and the U. S. A. should be studied with full reference to its probable effects on the commercial position of England. Further, political developments in the Colonies, in the Near East and the Far East, in Africa and China are all matters fraught with serious consequences and can be best understood from the geographer's view-points of fertile spots capable of development and spots already developed. The British Empire itself is well worth a careful study with reference to her supply of raw produce, sale of manufactured goods, development of new areas, improvement of the partially developed ones and tightening of the ties of unity within the British world.

One function more has Geography to perform and that is the interpretation of the past history of the races with all their social, religious and political tendencies, habits and customs down to the very details of their art and literature. How habits and customs vary and how they are conditioned by the geographical environment are to be investigated by the student of Geography. Peculiarities of social and religious customs and tendencies, singular views on life and the lines on which philosophy has developed, man has thought and worked, should be interpreted by the student of Geography. The Political history of nations, their invasions, occupation and development and the very growth of their constitution find their explanation in Geography and the senior student, must at least reach the threshold of this investigation and be prepared to enjoy the riches in store for him before he passes on to the next stage in the study of Geography.

UNIVERSITY REFORM—VII.

CONSCIENCE CLAUSE.

(Continued from page 30.)

BY MR. S. SANKARANARAYANA, M.A., B.L.,
High Court Vakil, Tinnevelly.

FROM an attempt at marshalling out arguments in favour of the Conscience Clause, we shall endeavour to meet some of the arguments advanced on the opposite side, and prove by a sort of *reductio ad absurdum* method the necessity for the introduction of the Conscience Clause in India.

RETORT OF THE MISSIONARIES.

The Missionaries contend that the Hindus, Muhammadans, etc., may establish their own colleges and compel the attendance of the Christians, and the Government will not interfere even then observing the principle of religious neutrality. This is advocating a wrong to a wrong-doer to right a wrong. No doubt if one robs a robber, the deed may in itself be justifiable in the moral code. But even this presupposes an equal strength between the contending parties which is not apparent in the present case under consideration. If indigenous efforts and the national resources available are so large as to stimulate the adumbration of a new era of the opening of private colleges, it may be justifiable on the part of the Missionaries to throw that challenge to the other party. As it is, it seems to be the challenge of a giant to a crawling worm, which is ludicrous and inappropriate. When a giant challenges a worm an extraneous agency has to interfere to defend the weak against the strong.

GOVERNMENT AIDS ONLY SECULAR EDUCATION.

It is urged that the Government aids only secular education, and so it has no voice in the religious instruction which is beyond its pale as there is no State aid with regard to religion. It is true that the Government gives aid to only secular instruction, and that religious instruction is merely voluntary and unaided. But when you compel the students to whom the State-aided secular instruction is given to attend the religious classes, the Government, since it has given the educational opportunity to subject them to indoctrination, has a voice of control to that extent. Mr. John Morley in his "Struggle for National Education" goes even so far as to say that a payment "though it may be nominally made for special purposes is and must be a payment for the institution as a whole. If I subscribe to a Trade Union, that subscription supports the Strike Fund no less than the Benefit Fund, however decisive may be the limitation of my intention to one of them." The argument therefore is futile.

ENGLAND—A CHRISTIAN COUNTRY.

It is said that the Conscience Clause is necessary in England because it is essentially a Christian country while India is not. In other words the majority of the people in England are Christians and the interests of the minority should not be sacrificed, and so the Conscience Clause is necessary. But since India is a subject country the interests of the majority may be sacrificed for the sake of the minority. The fallacy of the argument need not require much comment.

Again, it is said that the Conscience Clause is necessary in England *because the* State is liable to suspicion if Church education should enjoy any advantage. It is not so in India. But we have to note that if there could be suspicion in a Christian country, there ought to be more in an essentially non-Christian country, in a State where the Christians are in a minority.

OPTION TO BE EXERCISED AT THE BEGINNING.

It is said that if we do not like to attend the religious classes we need not have come to that college at all, that we could have sought admission elsewhere, that after joining that college with the full knowledge that we will be compelled to attend the Bible classes, we ought not to say that we are not given the freedom to keep out of the scripture classes. This seems sound at the outset. But we may pertinently ask: "How many cases are there where there is really such an option as is imagined?" In many places there is only one institution, and that happens to be a Christian institution. Government is not free in sanctioning the creation of new institutions because of the fear that they will come into competition with the institutions already existing. Again, even if there is a non-Christian institution, the students are so numerous that the non-Christian institution could not accommodate all the applicants. It then comes about that the students have no option but to enter the Christian college, and it would be unfair under the circumstances if the institution takes it as an opportunity to force its gospel into their prejudiced but plastic minds.

Again, the Christian institution has no right to force a student to submit to the religious classes since he has the legal right to attend the secular classes alone which are aided by Government funds. The students have a right to receive that instruction alone without subjecting themselves to the other classes which are voluntarily undertaken and for which there is no Government aid or sanction. From another standpoint Gladstone said that there must be "an entire freedom on the part of the parents corresponding with the freedom of the teacher to teach."

DEATH-KNELL TO THE MISSIONARIES.

It is hotly contended by the Missionaries that the Conscience Clause is exclusively aimed at the Missionary institutions, that if this is passed the Christian institutions will be reduced in number, and that they will finally be driven out of India. But the advocates of this argument are under a misapprehension that the Conscience Clause does not equally apply to a Hindu College or a Parsi College inculcating a Hindu or a Parsi religion. Again, there is no reason to fear that the Missionaries will be driven out. Mr. Telang himself said that an eminent representative on the Educational Commission testified to the fact that it will not be so. On the other hand if attendance in religious classes is made purely voluntary, there will be less of distrust, and more of confidence that what is taught in those classes have really something genuine, something worthy of note, something which a student may profitably learn to make education perfect.

(To be continued.)

THE POETRY OF CHILDHOOD.

A LECTURE by PROF. P. SESHADRI, M.A.

Prof. P. Seshadri, M.A., of the Benares Hindu University, delivered an address on the "Poetry of Childhood" at the Crosthwaite Girls' College, Allahabad, at 2 P.M. on Wednesday, the 4th March. Prof. Seshadri began with an analysis of the mainsprings of the Poetry of Childhood. The innocence, helplessness, beauty, imaginativeness and unconscious humour of childhood seemed to be responsible for the inspiration while the joy and beauty of childhood seemed also perennial sources of equal strength. In retrospect, these qualities assumed added grace and the result was the expression of the Poetry of Childhood among all the races of the world from the dawn of the world's civilization. He illustrated many of these aspects of the poetry of childhood with readings from Rabindranath Tagore, Stevenson and Blake.

The Crescent Moon of the first had a large number of lovely lyrics on the subject. There was the typical Indian mother in it who had no hesitation in saying that the child had always been in her mind, in the playthings of her girlhood, the gods of her household and in the deathless spirit who ruled the home; there was the little child in the *Champa Flower* who would love to tease mother by transforming himself into a flower high upon the tree, but would come down at sunset; the child who would love to be a merchant; and bring heaps and heaps of gold to his mother, and another whose great ambition was to be a pedlar or a gardener, that he might go about as he liked without being restrained by anybody, and be allowed to dig into the earth without being warned against soiling the clothes. There was a touch of unconscious humour in the child who boasted that when he grew old and his clothes did not fit him, he would give them over to his elder brother!

Stevenson's *Child's Garden of Verses* was also a beautiful collection of the songs of child-life. There were children dreaming of

> Armies and emperors and kings,
> All carrying different kinds of things,
> And marching in so grand a way
> You never saw the like by day.

There was the boy who said that when he grew to man's estate he shall be very proud and great, and tell the other girls and boys not to meddle with his toys.

Blake's Songs of Innocence was another classic in the subject. There was pathos and an effective plea for the oneness of humanity in the song of the *Little Black Boy* who said that his soul was white though he was black, having been born in the southern wild. Elizabeth Barrett Browning's *Cry of the Little Children* was another sad poem drawing attention to an aspect of the ill-treatment of children, now happily at an end because of valuable Government legislation on the subject. Poems of this kind reminded one of the possibilities of another side to the question of the poetry of childhood. The traditional pictures of the happiness of childhood had been questioned by Gibbon, in his *Autobiography*, who said that of childhood, he remembered nothing except the pain. De Quincey, and curiously enough, even W. B. Yeats, had similar autobiographical confessions. It was for them to consider if anything could be said in favour of such views.

In conclusion, Prof. Seshadri exhorted his hearers to make a special study of childhood, a subject for which women were probably better fitted and had better opportunities than men. There were a number of beautiful lullabies containing a large body of the poetry of childhood, scattered all over India. They deserved collection and translation. The meeting dispersed with a vote of thanks to the lecturer proposed by Mrs. Gardner, B.A.

THE TEACHING OF SANSKRIT.

By MISS N. B. DAS, B.A., L.T.,
of Crosthwaite Girls' College, Allahabad.

I

NO cultured mind will deny the importance of Sanskrit in the education we impart to-day, nor can a judgment be called sound which will banish Sanskrit from our schools and colleges. However, Sanskrit is gradually taking a more and more advanced step in the field of culture as it by all means ought to. But there is one great problem for the teacher of Sanskrit, to-day, to solve—and that is, how to popularise Sanskrit amongst our school children—in other words how to make Sanskrit easier and more attractive. There was a time when the pupil had to do all the work and the teacher was meant to be the critic of the pupil's work, and if the pupil was stupid or did not learn anything, the blame would be with him and not with the teacher. But the tables are turned now—and it is the teacher who is now blamed for the stupidity or inattention of the pupil. Teachers who have had to pass through the fiery ordeal of a Training College will ditto my words—I am convinced. A pupil too now-a-days expects to find pleasure in everything and if the teacher sets some unpleasant task he has to coax his pupil to do it by proving to him the utility of the unpleasant task. The first bitter dose in Sanskrit is the declensions—the second, conjugations, the third, the rules of 'Sandhi' (*i.e.*, joining words or syllables), the fourth, the rules of cases and case-endings, the fifth, the 'krit' and 'taddhit' suffixes, and the sixth the 'samasas.'

The usual practice is to start with declensions. Children do not understand why they cram those dry lists of words (Sanskrit declension is much more complex than Greek or Latin declension). Then the teacher passes on to conjugation which is like falling out of the frying pan into the fire—and the result is many a X class student writes अहं पश्यति instead of अहं पश्यामि and makes similar mistakes. Thus, often do we find that much time and labour on the part of the pupil as well as of the teacher are wasted; and by the time the pupil passes his X class examination he leaves Sanskrit with a salute of terror or displeasure never to study it again. What a great pity! Can we not do something to get over this state of things? Can we not find out a remedy for this? English now-a-days is taught by the Direct Method. Can we not teach Sanskrit by the Direct Method? Yes, Sanskrit can be taught by the Direct Method and ought to be taught so by all means. But it all depends on the teacher. Then again, the first disadvantage is want of proper text-books. We now-a-days have a number of text-books, no doubt, but they contain mistakes, misprints, and the language often is too stiff and artificial for children. From the linguistic point of view some of them are objectionable. Children will never learn good Sanskrit style by imitating the style of those books. So the first need in this important branch of study is books, containing correct, easy and simple language. The task is not so easy as it appears at first sight to be—and the person who will impose the task upon himself will be required to put forth a good deal of his effort in this direction before he is crowned with the laurels of success.

II

Leaving aside the grammar problem for the present, let us turn to the Sanskrit language, for, in the history of a language, language comes first and then follows grammar. A

language may be compared to a living organism ; just as a living organism passes through the different stages of birth, growth, development, death and decay, so does a language pass through similar stages. As soon as an infant is born, we do not burden it with rules and regulations. We allow it to grow to a certain stage and then tell it not to do this, that and so on; that is to say, we restrict its modes of actions by certain rules which prevail in our society; and we try to make the child like ourselves. In society these are included in the code of conventions ; in language these are arranged and formulated in what is called grammar. A language, as soon as it comes to an existence, is not restricted by rules of grammar. It grows of itself to a certain extent, it is used by people to convey some meaning and to express some ideas. One speaker uses it in one way, another in a somewhat different way till at last the speakers realise that if each individual uses it in his own way, the language of one individual would after a time be unintelligible to another, and so, instead of becoming one language, it tends to become as many as there may be speakers. Thus the path of the language is chalked out by grammar. If a part of it traverses beyond that mark it will be censured and will remain an ostracised branch or will be permitted to create followers of its own, or die an inevitable death.

So, we find that in the history of the growth and development of a language, the language itself as the most important and powerful means of self-expression, stands first and foremost, while grammar takes a secondary and subordinate position. English is a foreign language and in our schools we teach it by the Direct Method. But while doing so we always remember the relationship between language and grammar. English has no kinship with our mother-tongues. It is a perfect alien in our midst, yet how quickly do we pick it up and how quickly do we learn to express ourselves in it! And Sanskrit, which has so much kinship with our mother-tongues—we consider too difficult to turn to! So many words of Sanskrit origin we use in ordinary conversation every day,—why every day, every hour of the day—and we never know, we never care to know the language they come from! Give a book of Sanskrit to Hindi-speaking children, they will read a line, close the book and say that it is too difficult to be read! Or if you advise them to choose Sanskrit as one of their subjects, they will ask you of what use it will be in future, or will tell you that it is too troublesome to memorise so much. Each and every subject requires a certain amount of effort and labour—and Sanskrit too, has its own share. Sanskrit has a great similarity with Hindi, but that does not mean that Sanskrit can be mastered by Hindi-speaking children without patient toil; yet, compared with other subjects it is easier and even if we devote half the time we devote to other subjects, we shall do more than ample justice to it.

Then again from the ethical point of view, can the teacher not create a feeling of curiosity in the children to learn Sanskrit? Can the teacher not deal with the ethical problems of Hinduism, without entering into the questions of sectarianism—can the teacher not impart into the children that India, left alone and sequestered, surrounded by the ramparts of mountain ranges, developed a history of her own in the past—and in the cultural history of the world, India takes a unique position? Revolutions have come and passed over her, and they have mostly been of an

intellectual type—and India in the past had tackled with some of the most complex problems of life and death. She was destined to create a "privacy of glorious light" for herself—and Sanskrit and Sanskrit alone will reveal to us the history of the tremendous mental progress of the Indians, and the titanic efforts of an intellectual nation to find out the significance of life and action.

A clever physician will often put a sugar coating over quinine pills and make bitter doses sweet by artificial means. The teacher can often allow his class to laugh and learn, by treating a topic humorously, and Sanskrit affords plenty of scope for humour. When children learn declensions, it will be very good practice for them to decline their own names and those of their friends, and learn the meanings thereof. Along with declensions they may learn the uses of the case-endings in cases, *e.g.*, the first case-ending in the nominative case, the second in the objective case and so on, and make sentences, the verbs being supplied by the teacher. Sanskrit affords ample scope for the teacher to teach the cases and case-endings together. Omitting the Vocative there are seven case-endings and six cases, *viz.*, कर्तृ, करण, संप्रदान, अपादान, अधिकरण in which the first, second, third, fourth, fifth and seventh case-endings respectively are used. In Sanskrit the sixth case-ending is not employed in a case or कारक like Greek or Latin—but it is simply a सम्बन्ध पद (used to indicate possession). It has no relationship with the verb, and so it is not a कारक in Sanskrit. The teacher need neither puzzle the children with the other different uses of case-endings nor with वाच्य or voices. When the children come across a nominative case, which takes the third case-ending, he may compare and contrast it with a nominative, taking the first case-ending—and he may illustrate the voices.

The Sanskrit teacher often forgets that he is teaching children—and children cannot follow the complexities of Sanskrit grammar. Words joined together by rules of "Sandhi" (संधि) are often an unintelligible mass of complex sounds to them. We know that in the growth of the Sanskrit language, the long words, sometimes taking 3 or 4 lines (one word) joined by the rules of संधि are the latter and artificial products of Sanskrit poets and learned writers—and as such, they ought to come in at a later period in the Sanskrit course for schools.

It is not possible to discuss in detail here, as to age of the pupil when he will begin Sanskrit. It will be quite reasonable to introduce Sanskrit in Class VII (taking the S. L. C. or Matric Class as Cl. X), when the average age of children is to be about 13. It is seen that younger children belonging to lower classes are taught Sanskrit grammar and the prescribed course includes "संधि", conjugation and declension, the uses of case-endings, "कृत and तद्धित" ('krit'and 'taddhit') suffixes and much more—which is practically impossible for the teacher to teach, and the pupils to follow. But the children have to be taught because they happen to be included in the curriculum! The teacher and the taught are at a loss as to what to do! The teacher will lose his appointment if his pupils fail, and the pupils themselves toil on and on to learn the incomprehensible masses of matter, as they must get through in their examination! Everyone knows the fate of the Sanskrit teacher! Will it remain the same in future too?—*Education*: Allahabad, Feb. 1925.

THE MADRAS TEACHERS' GUILD.

EDUCATIONAL CONFERENCE.

THE annual Educational Conference conducted under the auspices of the Madras Teachers' Guild was held on the 6th Feb. 1925 in the St. Gabriel's School Hall. A large gathering of teachers and educational officers were present. Dewan Bahadur Sir R. Venkatratnam Naidu opened the Conference.

WELCOME ADDRESS

Rao Bahadur A. C. Pranathartihara Iyer, the President of the Guild, welcomed the members present and requested Sir R. Venkatratnam to open the Conference. In the conrse of his remarks he said he had to repeat the old cry over the improvement necessary both in the educational system and organisation, and over the betterment of the conditions of service of the teacher. He said that these would never be achieved unless there came a change in the angle of vision. There had been certain reforms but they were thoroughly inadequate. The progress made so far had not been commensurate with their eager hopes. Speaking about the Guild, he said that it had been steadily working. During the past year good work had been done in the direction of co-operation. The encouragement they got from the public was very small. The lot of teachers continued to be very miserable. Now that education was in the hands of popular representatives, the teacher migth come forward and take his place in the administrative bodies of the State. He should think that the protection required was what was known as minority protection and for that purpose some seats must be provided for them in the various administrative bodies.

In requesting Sir Venkatratnam to open the Conference the speaker said that Sir Venkatratnam was a distinguished educationist and was a missionary of hope, faith and charity and was well-fitted to be their guide, philosopher and friend.

Sir R. Venkatratnam then took his seat amidst loud applause.

PRESIDENTIAL ADDRESS

The President began his address by paying a glowing tribute to the character and virtue of the late Rev. Leith and bemoaned his loss.

He thon said :—"Privileged to participate in this Conference I shall naturally seek to realise its true significance. All over the country the wise and good of every community have been ardently pleading for unity, sound unity, unity of single-hearted devotion to an uplifting aim of cordial co-operation, for the general weal of mutual good-will in beneficent service, at least of the feasibility of an invigorating and enlivening unity. This Conference should furnish a noteworthy instance of this unity. This Conference is the visualised expression of the union in head and heart of a numerous and widespread band of workers who in the zealous promotion of a national end have learnt to eliminate distinctions of birth and position, and to extinguish dissensions of caste and race. That principle of religious neutrality, which to many minds signifies only prudent policy, is here amplified and illustrated as a potent solvent of differences and a focus for sympathies. Is there another land under the sun where influences and energies so divergent in their origin, become united, in one ample stream of harmonious endeavourings for national enlightenment? With this cheering spectacle before me, ought not the mind and the heart address themselves to

a keen and dispassionate review of certain exciting problems, for instance, communal institutions and Conscience Clause? Again is not this spirit of reciprocity and comradeship generated at school with adequate effectiveness so as to operate in future years to the numerous sources of citizenship or public service? Does not the school in so functioning approve itself as the nursery of democracy? Lastly, how shall we receive the recent highly authoritative indictment that at our schools are forged the first links in the chain of our national bondage? However, I for one, do presume and do avow that the work to which the members of the Conference and their compeers are devoted is neither vain nor vile, but that with all its acknowledged defects, it is a work of national unification and hence of national strength and advancement. One might therefore feel no hesitation in wishing that work, and with it this Conference, God-speed.

THE INDIAN TEACHER THEN AND NOW.

"As regards the Indian teacher the one outstanding question is, what is his position in the national life? In 1814 a Despatch of the Court of Directors described the Indian village teacher as a person held in great veneration throughout the country. 110 years later, Dr. Rabindranath Tagore execrates the Indian teacher as a tyrant. How is this difference in appreciation to be accounted for? In my opinion the difference is only, if I might venture to state it as a tried truism, the difference between India of 1814 and India of 1924, the difference between a reposing India and an awakened India, the difference, so to speak, between a want-begotten rest and a restless quest. The teacher primarily helped to start that quest and the teacher alone can satisfy that quest. This quest is a full and vigorous national life of economic solidarity and of spiritual vitality. We need not be frightened that the system that was in vogue had been radically wrong and should be rooted out. Were it such an evil it would have all darkness concealing its own gloom. In fact it is the very system that has fostered the spirit and imparted a stimulus for the improvements already made and for the greater improvement.

LINES OF REORGANISATION.

"The system of education however would have to be vigorously reorganised alike in the view-point of vision and expanse of scope, a modification of methods, a multiplication of resources. Reorganisation embraces a threefold function, to reserve the best, to reject the bad and to receive the nutritious. This reorganisation to be commensurate with the demands of the day has to be conjointly achieved by the leading spirits of all walks of life. The work of education, observes a well-known educationist, can be compassed by the joint effort of the whole nation, but educational reorganisation is mainly for the benefit of the future and responsibility therefore lies primarily with the teacher as the custodian of the future worker and the citizen. He who has thus to purvey to the generations to be, has to partake the nature of Providence, rich in contentment, abundant in hope, and unwearied in work. In this spirit alone shall the Indian teacher labour, if he proposes to re-establish himself in his economic position in the national life. Of course he is entitled, not for his private sake, nor on behalf of his family, but in the interests of the nation, to adequate competence. "Education", another writer observes, "may be expensive but ignorance is still more expensive

and a true teacher far from being expensive, is a great economiser."The Government, mindful of the permanent good of the people, should strive to keep the teacher above want, for a class of ill-provided teachers in the last analysis, discloses a neglected people. However, as the same writer remarks, it would be well for us if we spend as much on the mind and as little on the body as possible. The rule of life demands greater vitality from the teacher than from any other member of the society. If the appalling illiteracy is to be steadily dispelled that consummation can be achieved chiefly through the life-work of a band of self-sacrificing servants of the nation, men and women, to whom comes the inspiration and grace to surrender the self. Your esteemed President has designated the teaching profession a salvation army, the happy phrase indicating the ultimate object of all teaching, namely salvation, not in the sense of strict redemption but in the sense of expanding illumination. The war cry of the salvation army was the ancient mantra from the Upanishads invoking the unity of the teacher and the pupil."

Sir R. Venkataratnam then declared the Conference open and wished all success to it

A resolution bemoaning the sudden death of the late Rev. Leith and expressing regret at his loss and conveying the sincere condolences to Mrs. Leith was proposed, the whole gathering standing.

FATHER BERTRAM'S LECTURE

Rev. Father Bertram then delivered an interesting lecture on "The Teaching Profession and its Problem." He said that he did not desire to inflict a long speech after the thought-provoking address of Sir R. Venkatratnam. The problems of the teaching profession were perennial. As time advances the number of schools and colleges increased and as the number increased, the problems also assumed larger importance. The main problem of the profession was, "What shall we do with the boys?" The task of the teachers lay only in successfully solving the problems. The task of the teachers was to train their students to educate themselves. Their duty was not to rub on the minds of the students much matter but they must train them to educate themselves. Unless this was done, all the work done by way of instruction would be mere waste of time. Instruction though necessary was not very important. Father Bertram then emphasised the necessity of introducing technical classes in all the schools. If they did so the problem of unemployment would be effectively solved. At the present time the colleges were over-filled because students could find no other way open to them. Regarding the teacher Father Bertram said that he must be an optimist, full of faith in the future, single-minded in his duty and absolutely devoted to his boys. Unless he were so, he could not expect much result from his work.

Mr. P. A. Subramania Iyer proposed a vote of thanks to Sir R. Venkatratnam and Father Bertram. The Conference was then adjourned.

The Conference met again at 11 A.M. on Saturday, 7th February. Mr. E. Bhashyakacharlu, Telugu Pandit, Hindu High School, opened a discussion on "The Raising of the Standard of Vernaculars." Messrs. Namasivaya Mudaliyar, P. Subramanya Aiyah and T. Ramanujachari took part in the discussion. M.R. Ry. A. Madhavaiah Avl., who took the chair, referred in his concluding remarks to all the points raised in the debate.

Mr. M. A. J. Tirumalai Iyengar opened a discussion on "The School Council and its Place in School Administration," traced the history of this idea and put in a strong plea for the starting of a School Council in each school.

Mr. K.S. Subramanya Iyer read an interesting paper on "The Vernacular Equivalents of Scientific Terms" and placed his work before the members. He desired that the Guild should take up this line of work. M. R. Ry. A.C. Pranatarthihara Iyer Avl., who was in the chair during the two previous discussions offered a few remarks. Mr. Madhavaiah offered to distribute freely 20 copies of "Tamilian Friend "among the members of the Teachers' Guild Committee that will be considering the vernacular equivalents and to find space in the journal for the transactions of the Committee.

Mr. M. S. Sabhesan, Secretary, S.I.T.U., was then called upon to speak on "What is expected of us as members of the teaching profession." M.R.Ry. S. K. Yegnanarayana Iyer, President of the S.I.T.U., took the chair. Mr. Sabhesan gave an account of the origin and growth of the South India Teachers' Union and showed how an organisation like the S.I.T.U. that could speak in the name of the profession should receive the sympathetic support of all classes of teachers. He referred to the lines of activity such as the Protection Fund and the Journal intended to be undertaken. The President appealed to the Teachers' Associations to co-operate with the S.I.T.U.

Mr. P. Subramanya Aiyah was then asked by the President of the Guild to explain to the audience the details connected with the dismissal of teachers of the Choolai Hindu Union Committee School.

The Conference adjourned for lunch at 2-30 P.M. and met again at 3-15. The discussion on "The Position of English in the Educational Curriculum" was continued, with M.R.Ry. S.E. Ranganatham Avl. in the chair. Messrs. P.A. Subramanya Iyer, P. Subramanya Aiyah, C. S. Venkatrama Iyer and others took part. The Chairman summed up the debate and expressed the view that English should not find a place in the Primary School stage and that in Secondary School, the medium of instruction in non-language subjects be mother-tongue. He felt that for some time to come the medium of instruction should continue to be English in the University colleges.

At this stage a wire was received by the President of the Guild from M.R.Ry. L.A. Govindaraghava Iyer regretting his inability to be present.

The last item in the agenda was an interesting lecture on "The Place of History in the School Curriculum" by Mr. E. W. Green, Principal, Government Muhammadan College. Mr. H.A. Hart, who was proposed to the chair in the absence of Mr. F. E. Corley, vacated the chair when he turned up.

When the business was over, the Secretary thanked the authorities and the staff of the St. Gabriel's High School and also the members. The Conference was then dissolved.

RESOLUTIONS.

I. The Madras Teachers' Guild has learnt with deep regret of the sudden death of the Rev. D.G.M. Leith, one of the Vice-Presidents of the Guild, and this Conference places on record its appreciation of the valuable services he had

rendered to the Guild. It begs to convey its sincere sympathy to Mrs. Leith in her bereavement.

II. This Conference is of opinion that the practice of taking finger-prints of students in the S.S.L.C. books be discontinued.

III. Resolved that the Director of Public Instruction be requested to issue a circular that the medium of instruction in all non-language subjects in "Secondary Training Schools" should be the mother-tongue.

IV. This Conference recommends to the Government that the standard of vernacular in Secondary School stage be raised by the lightening of English therefor.

V. This Conference recommends that in view of the distinct and separate interests which the teaching profession as such represents, the Government should provide in all representative institutions such as Municipalities, Taluk and District Boards and the Madras Legislative Council, adequate representation to teachers.

is Conference requests Government to ap committee of the Legislative Council as suggested at the 16th Provincial Educational Conference held at Tinnevelly in June 1924 to enquire into the conditions of service, security of tenure, etc., of the teachers in aided institutions.

VII. Resolved that the paper on "Vernacular Equivalents of Scientific Terms" read by Mr. K. S. Subramania Iyer be referred to the Mathematics and Science Section for further consideration.

VIII. This Conference recommends that a School Council on the lines laid down in the resolution passed at the Provincial Educational Conference held at Kumbakonam in 1922 be started in each school with modifications to suit local conditions.

IX. (*a*) This Conference expresses its sense of disapproval and indignation at the abrupt and sudden termination of tenure of the five teachers, formerly of the Hindu Union Committee School (Choolai), without having recourse to the usual formalities incidental to the taking of such action and conveys its sympathy to the teachers in distress.

(*b*) This Conference further expresses its sense of disappointment at the shyness and reserve on the part of the management to take (1) the public, (2) the parents, and (3) the teaching profession, into their confidence and do what they can to allay the anxiety and lull the alarm naturally felt by the teaching world.

(*c*) It also recommends that the Guild in particular and the teachers in general should give relief to the distressed teachers (1) by enabling them to run and strengthen the Tutorial High School they have started, (2) by dispensing aid from the Co-operative Society with suitable safeguards, and (3) by urging members of the Guild and other friends of the profession to give financial aid in the shape of donations to the teachers thrown out of service.

X. This Conference is of opinion that the Madras University Act of 1923 should be so amended as to provide for a direct representation in the Academic Council of each of the vernacular languages in the Presidency of Madras, the representatives being returned by a common electorate of teachers engaged in the teaching of the vernacular languages in the constituent and affiliated colleges.

XI. This Conference is of opinion that it is desirable that teachers of over 3 years' standing who desire to qualify themselves for the higher examinations of the University of Madras be permitted to appear for the same without the production of the attendance certificates and it requests the Vice-Chancellor to introduce the necessary modifications in the Laws and Regulations.

WOMEN STUDENTS IN GERMANY.

According to statistics just published by the Universities of Germany, the number of women students, which in the summer of 1923 had risen to 8591, as against 4000 in the summer of 1914, has now fallen to 7474. Whereas formerly women were fairly one-sided in the selection of their profession, generally choosing medicine and teaching, they are now devoting themselves in larger numbers to economics and law with the object of becoming active in economic and social life. A considerable number have also taken up pharmacy and the natural sciences, in spite of the keen competition in these branches, and there are a few women who have taken up engineering and architecture in the Technical Universities. Berlin has the largest number of women students, there having been 1367 in the summer of 1924, while Munich had 896, Cologne 502, Freiburg 375, Frankfurt 530, Leipzig 389, Hamburg 341, Heidelberg 256, Bonn 337, Breslau 369, Munster 250, Marburg 255, Gottingen 215, Jena 260, Tubingen 205, Wurzburg 167, Konigsberg 169, Kiel 175, Haile 172, Gie Ben 105, Greifswald 115, Rostock 106, Erlangen 78.

FOREIGN LANGUAGES IN JAPAN.

The League of Nations has just issued a small book by Professor Inazo Nitobè on the "Use and Study of Foreign Languages in Japan" which gives a very interesting history of the development of the study of foreign languages by the Japanese. After dealing with the influence of the Chinese language, alphabet and culture on Japan, he goes on to show the relations of the various European nations—the Portuguese, the Spaniards, the English and the Dutch—with Japan in the 16th century and how, on account of the hostile attitude of the Japanese, the first three nations became discouraged while the Dutch alone settled down and established a factory in the neighbourhood of Nagasaki. But the Japanese were with instinctive wisdom so suspicious against these foreign devils that they forbade their people to learn any foreign language, and it was not until the middle of the 18th century that the Dutch language attracted attention owing to the surgical skill displayed by Dutch medical men whereupon Japanese scholars were permitted to translate medical books from that language into Japanese.

It was, however, in 1854, after certain European Powers and America had compelled Japan to open up some of her ports to world trade, that the serious study of foreign languages really began. The Translation Bureau that had been established in 1811 for translating the books of the "barbarians" into Japanese was now extended and as early as 1862 began to be known as the "Institute for Progress."

The language most frequently studied was English, a fact that is easily explainable by the commercial relations between Japan and the Anglo-Saxon countries. French being regarded as the language of the most perfect military country of Europe was made obligatory for all officers and as the 'Code Civil' was being imitated by the Japanese administration of justice, the language was also studied by Japanese lawyers. German displaced the Dutch as the language of medicine and was made obligatory in the medical faculty of the University. After the Franco-German War, however, the victory of Germany attracted great attention and, in addition to this, the German Civil Code excited the admiration of the Japanese lawyers so that the German language began to be studied both by the officers of the army and by the lawyers.

The most remarkable fact is that, in spite of Japan having declared war on Germany in 1914, progress of German studies in Japan has been so rapid that German books are now imported into the country in far greater numbers than that of any other language.

The German language is not only taught in all Universities, but in all High Schools and Higher Girls' Schools. Curiously enough, English and French are preferred for Girls' Middle Schools, although, as Nitobe points out, the German "Hausfrau" is the ideal aimed at for Japanese girls.

When we read the above facts and compare the intellectual advance of Japan with that of India, we realise how strongly the mind of the educated Indian has been anglicised and what great loss we have suffered by the fact that we have not paid any attention to the study of the great languages and literatures of the world.—Extracts from *Industrial and Trade Review for India*, March 1925.

Reviews and Notices.

CHEMICAL SYMBOLS, FORMULÆ AND CALCULATIONS, BY A. W. WELLINGS. (METHUEN & CO., LTD., LONDON). *Price* 3s.

Beginners often find it difficult to master the fundamental laws and theories of Chemistry and the only way to familiarise is to solve as many chemical calculations as possible. Symbols, formulæ and equations are a stumbling block to many a student who so long as he cannot grasp their real significance will regard them as a 'collection of recipes to be committed to memory, solely in order to gratify the tastes of examiners.' The author of this book has tried his level best to remove the barrier by examples and explanations though more problems at the end of each chapter will be a valuable addition.

The book which is well got-up will be found useful to the Intermediate students of the Madras University.

THE RELATIONS OF GEOGRAPHY AND HISTORY, BY H. B. GEORGE—5TH EDITION, EDITED BY P. J. R. HOWARTH. (CLARENDON PRESS, OXFORD, 1924). Pp. viii & 330. *Price* 5s.

It is an ordinary truth that much light is thrown by Geography on History and that geographical data are very valuable for solving historical problems. The other side of the picture tells us in the words of the author "how human action alters the aspect of those things of which geography takes cognisance." The book explains the general nature of geographical influences, the part geographical factors play in war, the main theatres of European war as explained by geography as well as the larger and more important subject of how these work in reference to the various European countries, to the Mediterranean Basin, to America and to India. The chapter on India was added in the third edition of the book in 1907, the writer feeling that apart from the value of India to the British Empire, it is "the country of all others in which the history is most visibly the outcome of the geography, if the latter term is used in its full sense and not as denoting physical structure only."

The treatment of India is however very meagre dwelling chiefly on the North-Western Frontier and on the vulnerability of the Hindustan plain to all invaders when once they surmount the first barrier. Other factors scarcely less momentous are ignored altogether.

In the chapter on *The Theatres of European War* which is supplemented by another dealing with the Balkan Wars of 1912-13 and the Great War of 1914-18, the main illustrations are derived from the wars of the French Revolution and from the siege-ring laid round the Central Powers by the Allies, though there were 3 gaps formed in the ring by neutral States. The problem of geographical, scientific and defensible frontiers especially valuable to great empires, has not been satisfactorily solved in the case of the empires we read of in history and existing at the present day; and of these mountain-frontiers are best described in the book. There is a separate discussion of the different kinds of frontier; though "geography may well despair of drawing any frontier that will honestly satisfy ethnology and must therefore let politics settle the question."

LIFE OF THIRU GNANA SAMBANTHAR, BY S. SABARATNA MUDALIAR, J. P. (PUBLISHED BY C. V. JAMBULINGAM PILLAI, MADRAS). Pp. xxi & 50. *Price* 10 *as.*

The author, Mr. S. Sabaratna Mudaliar of Jaffna, is a well-known scholar who wrote this life of Sambandha in 1920, basing it closely upon the account given in the *Periyapuranam*. Both Sundarar, the fourth of the Samayacharyas of Tamil Saivism and Nambiandar Nambi as well as the great Sekkilar have given us accounts of the life of Sambandha. Sekkilar acknowledges his indebtedness to the Sanskrit work of Upamanyar in writing the life of the saint whose life is altogether enveloped in miracles and whose writings, so far as extant, are 377 hymns of rare literary merit and of exceptional musical vibration and rhetorical and emotional force. The author gives us an account of Sambandha's time and a summary of the several attempts made to fix his age, especially those of Caldwell, P. Sundaram Pillai, and Dr. W. Taylor, the last of whom assigns the saint to the 15th century on very slender grounds. Sambandha's method of work, appealing largely to the emotions; his views of the relative importance of Tamil and Sanskrit; his conveying many sublime truths of the Siddanta Philosophy in his hymns, are all pointed out in vigorous and clear language in the introduction which contains suitable illustrative examples also. The life follows closely Sekkilar's account and is thus a parallel to the vigorous, though archaic, version into Tamil prose of the biography by the late Sri Arumuga Navalar. The miracles are set forth as in the Purana and the author evidently attempts to portrary the life in all its traditional genuineness.

TEACHERS' ASSOCIATION, HOSUR.

Mr. M. N. Venkataraman, Secretary, Teachers' Association, Hosur, writes under date 19-3-25:—

At the kind invitation of our Association, the Second Session of the Annual Salem Dt. Secondary School Teachers' Conference will be held on the 11th and 12th April next in the Board Secondary School, Hosur, under the presidency of S. A. Steele, Esq., B. A., District Educational Officer, Salem.

M. R. Ry. S. K. Yegnanarayana Iyer Avargal, M.A., President of the S.I.T.U., and also M.R.Ry. M. S. Sabesan Avl., M.A, L. T., Secretary of the S.I.T.U., have promised to attend our Conference.

Many important resolutions concerning the teaching profession will be passed at theConference.

May God help us in making the Conference a great success.

The Educational Review.

Education in China.

Bolshevik Russia is not apparently the only unhappy land in the world of to-day where educational conditions are in chaos and all discipline in the school-room is at an end. China is also in the same plight, the present disturbed political conditions reacting on educational life. Interesting revelations have been appearing in the press, from time to time, giving an account of existing conditions. The Chancellor of the National University of Peking was complaining the other day that the salaries of the staff were in arrears for more than nine months and while the political chieftains were fighting among themselves, the teachers at the Universities were starving and unable to work! But this is apparently not the worst aspect of the present state of affairs. Here is an account of the condition of schools in Wuchang furnished by a Chinese correspondent to the press:

> Although it is yet early in the summer, most of the Government schools in Wuchang have already broken up. The students decided to have no examinations, and since their word is law, no examinations were held and they have all gone home. Really, the discipline in these schools is so bad that it is worse than useless. The students take up the attitude that they are the employers of the teachers and the latter are merely their servants. There is an understood compact that nothing is to be expected of students in class; the teacher is to do the talking and the students sit and listen. The students attend classes only when they choose to, and attendance records are rarely kept. The students also choose what subjects they shall study and among other things Ethics has been definitely thrust out of the curriculum.

Conditions apparently get to be more exciting on certain occasions. Here is a report with regard to a strike of students relating to the same month:

> As the result of a strike among the students in the Amoy University, which has arisen from demands of the students that the President, and a number of teachers including the Dean be dismissed forthwith, the Amoy Police have arrested several of the teachers in order to satisfy the demands of the students. Meanwhile Dr. Lim is reported to have secured the assistance of the Director of Constructions and some 500 labourers to subdue the students by beating them with canes, sticks and bamboos. The leader of the Students' Union received bruises which have since resulted in his death, whilst a large number of other students have received more or less severe wounds.

In another instance, the boys at a school went on strike and left for their homes. The school authorities not having shown any advances to get them back, the boys negotiated for permission to come back to school which was readily granted without any penalties. The boys formed themselves into a procession with flags flying and drums beating and entered in triumph as if they had won a great victory in war! The unsettling of constituted authority in a country has dangerous effects, but it is not the least serious of them that educational conditions lapse into chaos.

True Education.

There is such a wide-spread tendency to associate education with literacy, without adequate attention to the deep and abiding qualities which constitute the essence of education, that Mr. Ramsay Macdonald did well, the other day, in making some unconventional observations on the subject. According to him, the man who goes through the college and comes out and is able to quote about many things is not necessarily educated:

> The most educated man he knew was a man who found it difficult to sign his own name. That man would be met on a hill-side if one wandered, as he sometimes wandered, in a country of rich historical memories, singing the old folk songs that were sung by men who had to sing because if they did not sing their hearts would have burst. He sang songs of love, songs of natural beauty, songs of heroism and romance. He (Mr. Ramsay Mac Donald) had sat by him on the hill-side, and his companion had talked to him about the sheep and the dogs and had quoted Burns, not as many would quote him from mere reading, but from reading with understanding.

The Encouragement of Indian Art.

The idea of establishing a central institute for Indian Art at the Imperial capital and encouraging it by scholarships and prizes has been in the air for some time and has received support in many quarters. During the recent session of the Council of State, it is interesting to note, a resolution on the subject was accepted by the Government in a form suggested by way of modification to the original terms proposed by the mover of the resolution, Mr. Haroon Jaffer. The resolution as passed requests the Government "to consider the advisability of formulating a scheme of scholarships and prizes for Indian Art-students engaged in painting, sculpture, architecture and artistic crafts and to establish a central institution where scholarship-holders and prize-men may continue their work for a period of three or four days." We hope that something useful will follow the acceptance of this resolution by the Government. We recognise the numerous and weighty financial responsibilities in which the Government is now engaged, but no nation can flourish with a complete disregard of her artistic life.

American Universities.

Some interesting features of American University life are drawn attention to by Mr. Julian Huxley in the columns of the *Spectator*. Going to college has in fact become an almost universal habit in America and in a few years collegiate education will probably become as common a feature there as primary education in the civilised countries of to-day. The Universities

are hardly able to keep pace with the great demands made upon their accommodation by the rapidly-increasing number of students. Junior colleges are being established at certain University centres to meet this demand in some measure and new Universities are being created with remarkable rapidity. The Carnegie foundation has helped Universities in several ways, by providing, for instance, the cost of pensions to the staff of Universities which have satisfied a certain standard of efficiency. One of the most interesting aspects of the Universities is the fact that a large number of students are able to maintain themselves by manual labour. In the first place, it is not considered beneath the dignity of a University student to enter on manual labour for maintaining himself, and secondly, it is apparently possible in a large number of cases to combine it with strenuous academic work.

University Standards.

As Chancellor of the University of Delhi, H. E. The Viceroy had some valuable observations to make at the last Convocation of the Delhi University. The multiplication of Universities in India in recent years and the introduction of a large democratic element into various University bodies have led to the fear in certain quarters that academic standards are likely to be diluted, some sign being already visible in the direction. His Excellency therefore did well in warning against such a consequence and the following remarks on the true ideal of a University deserve wider attention :—

> Those whom it turns out must be of good, well-tested metal if the stamp of the University is to stand for anything in the estimation of the world. We all know what happens when a coinage is debased, how the value of each coin becomes progressively less and the number of coins becomes progressively more. Perhaps it is not altogether a fanciful analogy that suggests itself between the coinage of metal and the stamping with the University degree of the young men who go forth into the world after completing their education. The good coin will pass freely welcomed and honoured throughout the country and even beyond its borders. The debased coin passes with difficulty even in its own country. Hitherto in India we have set and maintained a reasonable standard of University education. But I am aware that apprehensions are felt in some quarters that the multiplication of Universities in recent times may tend towards the lowering of these standards. I know that you here in Delhi are fully conscious of the fatal consequences to the country that would arise from any serious deterioration in the University standard and that you are determined to bear your part in preventing such a catastrophe. I will mention only one sphere in which a high standard of University education has recently required added importance. The Government of India are, as the result of the Lee Commission Report, about to embark on large schemes of Indianisation in most important administrative services in the country. The success of the policy depends on an ample supply of well-trained men from the Universities of India, equipped with knowledge, with judgment and with character and all well-wishers of the country must see to it that at this critical stage of development there is no failure in the source of supply. It is my earnest hope that the Universities of India realising the great opportunity, the great responsibility that rests on them for the future of the country and the fulfilment of its many aspirations, will continue to devote their utmost efforts to the maintenance of the highest ideals of education.

We have no doubt that under the leadership of its able and energetic Vice-Chancellor, Sir H. S. Gour, the University will endeavour to live up to the high ideal sketched by His Excellency the Viceroy.

Education in Mysore.

The last Administration Report of the Government of Mysore draws attention to another year's progress creditable to the authorities concerned. There was an increase both in the number of public and private institutions as well as the number of scholars in them. On an average, there was one institution for every 3·24 square miles of area and for every 645 persons of total population and one out of 2·57 of the school-going population was under instruction. The proportion of pupils to the total population of the State was 1 in 19 as against 1 in 20 in the previous year. The percentage of boys at school to the total male population was 8·25 and of girls to the total female population was 1·97 and of both to the total population was 5·17. It is interesting to note that the State has a large number of Night schools intended for those who are working as labourers or agriculturists. During the year under report, there were 1302 such schools with a strength of 14,947. For a number of years to come, the problem of the education of the masses in the country can never be solved by mere elementary education for children. The need for adult education by means of Night schools is therefore particularly great and here is a piece of activity worthy of emulation by other States in India. We must congratulate the Mysore Durbar on the efficient way in which it has worked the Education department during the year.

Vernaculars as the Media of Instruction.

In the midst of much uniformed talk with regard to the use of the vernaculars as the media of instruction in all stages of instruction and the adoption of Hindi as the *lingua franca* of the land, it is refreshing to turn to some of the very valuable remarks made by the veteran educationist, Prof. K. B. Ramanathan, at a meeting of the Madras Teachers' Guild. "But taking into consideration the present circumstances,"

aid Prof. Ramanathan, "the limited ernacular literature, the want of capae teachers to impart instruction rough the vernacular, and the spirit of odern society to take part in all the orld movements affecting it, he thought at a common language like English as necessary and would be so for years come. He explained that his attitude as not against *vernaculars* even for the niversity course. Hyderabad was runing a University with Urdu as its chief nguage. But the condition of South ndia was different; the multiplicity of nguages made the question of vernaulars as the medium of instruction a practical impossibility. The proposal of making Hindi take the place of English in Northern India may be practicable, but in Southern India, such a proposal would put a great strain on the students. Further, as regards the study of humanities, there was no difference between English and any other language. Shakespeare and Milton would appeal to all. The study of English would not in any way tend to denationalise society..... But for a long time to come, the medium of instruction in the College department should be English. English education was liberalising Indian minds. The Depressed Classes Movement and various other movements insisting on equality and liberty would never have risen in India but for the magnetic and stirring influence of the English language."

Control of the Inspecting Agency.

The dangers of democratic control over education are already being realised in some Provinces in India. One of the latest instances is from the Province of Bihar and Orissa, where the Legislative Council has just carried a motion against the wishes of the educational authorities that the control of Sub-Inspectors of Schools should be transferred to local bodies. We can claim to have some knowledge of the poor efficiency of our local bodies and their want of ability in administration. We are clearly of opinion that in the present stage of the development of our local bodies in India, it is unwise to entrust them with the control of the Inspecting agency. Constant interference with their work and an utter neglect of the principles of strictness necessary for enforcing high standards of efficiency will be the common features of control by local bodies. We hope that the resolution will not be acted upon. Conditions of education are particularly backward in Bihar and Orissa and the new proposal will only tend to make them worse.

Sir Rabindranath Tagore.

It is significant of the growing appreciation of Sir Rabindranath Tagore that Indian Universities should turn to the serious study of his works. The Benares Hindu University was the first in India to prescribe his works as text-books for University examinations, the *Gardener* having had the distinction of figuring in the paper on Lyric poetry for the M.A. degree examination. Rabindranath's *Hungry Stones*, *Stories*, and *Gora* have also been prescribed, from time to time, as books for rapid reading, at the Admission and Intermediate examinations of the University. But the most striking proof of the growing appreciation of his genius at Indian Universities is furnished by the fact that an American lady, Miss Dimmitt, Professor of English at the Isabella Thoburn College, Lucknow, has just come as a research student to spend a short time at the English Department of the Benares Hindu University, to write a thesis on Sir Rabindranath Tagore as a dramatist with special reference to his *King of the Dark Chamber*. The Head of the Department, Prof. P. Seshadri, is the official "Supervisor" of the thesis which is being written for an American University. Apart from the appreciation of Sir Rabindranath's dramatic genius which the writing of the thesis implies, it is significant of the unique position of the English language in the world of to-day, that an American should write a thesis on the work, in English, of a contemporary Indian writer at a Hindu University in Benares, under the official supervision of an Indian approved for the purpose by a University in America.

Education, March 1925.

The distinguished author of the book under review is one of the few enthusiasts in India who have taken to a systematic study of child-nature. The book embodies the results of close study, by the author, not merely of the existing literature on the subject, but of the actual mental and physical growths of children, as witnessed by her in several schools in Britain and India where she has had the opportunity to work. Within a brief space of 200 pages, the author has contrived, in her plain, matter of fact, and at the same time, engaging style, to elucidate the various topics connected with child life such as the sense perception, play, the service of Hand in Mental Development, fatigue, exceptional children, measurement of Intelligence and the Kindergarten system; touching the various theories on these topics and supplementing them by her own views based on personal study and investigation. We would especially commend to our readers the beautiful and inspiring chapter on the Kindergarten system in which without going into technical detail, the author has surveyed the basic principles of the system, and pleaded in accordance with these principles for the Indianisation of Indian education. We are sure that this little book will prove an excellent handbook for teachers as well as parents and others interested in the subject and kindle in them a deeper interest therein. It has been already recommended by the Academic Council of the Madras University as a suitable text-book for the students appearing for the L. T. Examination and we hope that other Universities will soon follow suit. We congratulate both the author and the publishers on this valuable publication and recommend every teacher to secure a copy thereof.

The Madras Christian College Magazine, January 1925.

The study of child nature is exceedingly important for both of the sciences of Psychology and Education. Its importance for Psychology is from the genetic point of view. In the child one is able to observe in simpler forms many of the processes at work which in adult experience become so complex as to make them difficult of analysis. Its importance for Education is too obvious to need extended notice, and yet there are some who are so short-sighted as to neglect it. Here in South India there are a great number of schools in charge of teachers who do not know the elementary facts about child nature. But with the progress of education the time will surely come when it will be considered as dangerous to employ a teacher who is ignorant of child nature as it is to employ a man for a physician who knows nothing of anatomy and physiology. Such a book as that which Miss Gordon has written will serve a useful purpose in hastening that day by putting teachers in possession of a primer which contains the fundamentals of the subject in a readable style. It is the type of book which we would like to see translated into our South Indian vernaculars, because it not only includes the principles of the science, but states them with special reference to the needs of Indian teachers.

A personality is the outcome of forces which are both hereditary and environmental so that child study must take account of both sets of factors. Much more is to be gained by teachers through the study of children for themselves than the mere perusal of books on the subject, however authoritative they may be. The trouble with so many students of other things as well as of child nature is the evident desire to be spoon-fed. They desire to get their information at second-hand rather than take the trouble to study for themselves. In many instances teachers have not the technique necessary to observe intelligently. Very valuable, then, is Miss Gordon's chapter on 'How to Study a Child,' particularly for those who are beginners in child study, and it is a matter of vital concern as much for the parent as for the teacher.

Certain subjects have been especially studied recently by educationists, and Miss Gordon gives useful accounts of the results of these studies. One chapter is devoted to the place of play in child life and in the educative process. It is a wholesome corrective for the old fashioned idea that play is a superfluity. The author brings out some of the most useful services which are rendered by play, for play has direct educative value, assisting in the training of the judging and other mental processes, as well as in the spirit of fair-play and other moral qualities. The play-ground affords a splendid type of voluntary democratic organisation. Another chapter is devoted to "The Services of the Hand in Mental Development." Sometimes the school in emphasising the development of the mental processes has tended to neglect the fact that intelligence is sometimes motor, and that these two factors, the mental and motor, are closely related to one another. The questions of 'Exceptional Children' and 'The Measurement of Intelligence' are closely related, since it is through the latter that we get our most accurate knowledge of the former. A final chapter deals with a question on which Miss Gordon is surely competent to speak, 'The Kindergarten System and Its Application to Indian Children.' Altogether she has succeeded in writing a most useful little book, and we hope that it may have a good circulation among teachers and parents who cannot but profit by what she has written on the nature of children and how they should be educated.

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