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I have to express my deep sense of gratitude to the various teachers' organisations in South India for having elected me to preside over this Provincial Educational Conference. I deem it a great honour conferred upon a humble school-master like myself without any prophetic pretensions or transcendental intuitions except perhaps a service of 37 years in the field of education. Coming as I do in the long line of such illustrious educationists and publicists as Professors Lakshminarasu, Yegnanarayana Iyer and P. T. Sreenivasa Iyengar, Vice-Chancellor C. R. Reddi and Rao Bahadur R. V. Rangaswamy Iyengar, Mr. S. Srinivasa Iyengar and Mr. Satyamurthi, who presided over similar Conferences in the past, I feel my unworthi-

ness all the more but trust that with your sincere goodwill and sympathetic co-operation, I shall be able to discharge the duties entrusted to me to your satisfaction.

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and been accepted for registration. It will go some way to unify the teaching profession and to protect the public from exploitation by the charlatan. At present any man opens a school and begins to teach without the requisite credentials. In Law and in Medicine only licensed and registered men can practise in Europe. Unless and until the teaching profession is unified and professional solidarity is secured, it is idle to talk about assertion of our rights and privileges. In England there is the Teachers' Registration Council (now called The Royal Society of Teachers) with a Chairman appointed by the Board of Education and forty-four elected members, representative of every type of teacher and every kind of educational institution. Each member of the Council is to hold office for three years. The certificate of Registration is valid for nine years renewable afterwards for other periods of equal duration so that a teacher must keep himself efficient all through his service in order to be on the Register. None but those who have passed through a successful course at a training college or similar institution, who also have shown themselves skilled in teaching will be accepted. The qualifications which will be demanded have been stated as a degree or its equivalent, a certain amount of training and three years' practical experience. For Lawyers and Advocates, there is the *Bar Council* and for medical men, there is the *Medical Council*. In the same way for teachers there should be a *Teachers' Registration Council* with a Teachers' Register. Such a Council if established in Madras will tend to promote the solidarity of the teaching profession and will immensely raise the standard of qualification of teachers in Secondary schools besides giving a prestige to the teachers' calling and

providing a departmental guarantee of efficiency. None but the skilled and the efficient will be accepted for registration. Some managers make it a practise to recruit teachers temporarily for nine months and to send them away in April, thus avoiding the payment of vacation salaries, and of increments and the necessity of appointing permanent men. In some schools, salaries are not paid for months together, and if paid, are paid very irregularly. All such cases of irregularity and injustice will be set right if the Government could, through the Registration Council, interfere and make mutual transfers of teachers possible and hear appeals from aggrieved teachers. It must be distinctly remembered that until conditions of service of the teacher are greatly altered, the quality of Secondary education cannot become satisfactory.

A word or two about the scale of salaries will not be out of place here. It has been urged at every Educational Conference that a minimum scale of salaries fixed by Government as operative throughout a given local area be insisted on as a condition of recognition but so far no steps have been taken to adopt the recommendation. Principal Seshadri in his concluding address at the All-India Teachers' Conference held in Madras last December said that if teaching was a noble profession equally noble were the callings of a doctor and a judge. The latter were doing the humane work of alleviating pain and rendering justice. When they were justified in asking for higher salaries and larger emoluments, the teacher should not be ashamed for demanding decent salaries to help him to lead a life of culture consistent with the dignity of his vocation. He should be able to live healthily, progress intellectually

and to provide for the education and marriage of his children and against his own sickness and retirement. Except in Bengal where the salary of the High School-master is a miserable pittance because of the immense preponderance of privately-managed and unaided institutions, in other provinces like the United Provinces, Burma and Bombay, the salary of the Assistant-master ranges between Rs. 250 and Rs. 400 and that of the Headmaster between Rs. 400 and Rs. 600. In some of the large High Schools, the Principal draws a salary of about a thousand rupees. In Madras a trained L. T. starts with Rs. 80 and rises by an annual increment of Rs. 5 to a maximum of Rs. 150 in fourteen years. The Headmaster of a Board School draws salaries from Rs. 150 to Rs. 200, whereas in aided schools he gets about twenty-five rupees more than his First-assistant. The best type of men cannot be attracted to the profession so long as the pay and conditions of service remain unsatisfactory. As the Interim Report on the Growth of Education says, "only too frequently the teachers have no heart in their work; in no province is the pay of the teacher sufficient to give him the status which his work demands." In 1927, the Government met only 23 per cent. of the total expenditure on Secondary Education in Madras and the fees met 52 per cent., whereas in Bombay, the United Provinces, the Punjab, Burma, the Central Provinces and Assam, the Government funds and fees met respectively 30 and 50 per cent., 51 and 29 per cent., 35 and 26 per cent., 48 and 26 per cent., 46 and 38 per cent. of the total expenditure on Secondary Education. From this you will see that except in Bombay, in all other provinces, Government funds paid much more than fees. This Conference should

urge upon the Government to pay from its funds an amount equal to the actual fee income of the High School after allowing 10 per cent. for Scholarships and concessions. The same Government in 1927 paid 42 per cent. of the total expenditure on College education when fees from Arts colleges met 43 per cent. When it makes a contribution to University education almost equal in amount to the actual fee income, why should it not accord a fair treatment to the Secondary education as well which the Hartog Committee describes as "education for the directing classes" in the sense in which the Secondary school should aim primarily at the selection and training of leaders. It is said that one of the functions of the Secondary school is to select pupils of the necessary ability to continue into the professional schools, and in a larger way to prepare the rank and file of leadership in all lines. Again a Madras pupil in a Secondary school pays an annual average fee of Rs. 24 and his average annual cost is Rs. 45. It is but reasonable that the Government should meet the balance of Rs. 22 whereas it grudgingly pays only 10 Rs. on the old antiquated principle of not more than half of the net expenditure. In England the principle followed in the case of Elementary school is "not less than one half of the net expenditure" of the local authority recognised by the Board of Education and in the case of Secondary schools besides residue grants, rates and Borough fund and fees. Parliamentary grants are made on a *per capita* basis. They are paid at the rate of £ 2 for each pupil between ten and twelve years of age, and £ 5 for each pupil between 12 and 18 years age.

While speaking of the local rate levied, I should like to suggest that for purposes of

Secondary education a certain rate, say 3 pies in a rupee, may be levied just as we levy a cess for Elementary education in each Taluk area. This may be invested with the District Secondary Education Board for distribution as supplementary grants towards the salaries of teachers and erection of new school houses. There was a limit till now in the amount which a County Council may raise out of the rates for purposes of Secondary, Technical and Industrial education, but according to Fisher Act of 1918 the limit was removed.

You will forgive me if I take you back once more to the question of scales of salaries. There are two drawbacks in fixing the scale to which I would like in fairness to draw your attention. The first drawback is that maximum salaries are reached far early in life but it may not be felt now as most of the young L. T.'s are at the early rungs of the scale and in about ten years they will reach the maximum. When they are between 45 and 55 years of age they should have increased increments as responsibilities connected with the needs of the growing family and the education of their children will demand a larger income. Either the scale will have to continue longer for another five years or young teachers should be warned to limit their families by adopting certain modern methods advocated by men of light and leading. Another drawback which the salary scales bring on is that merit is prevented from receiving its adequate reward. It is just as difficult to accelerate the promotion of promising young men as it is to prevent the increase of salaries of normal mediocrities. In a certain well-conducted school, a certain teacher was heard to say to one of his colleagues who was working hard for the

progress of his boys: "Why do you waste your lungs and energy like this? You and I will get the same increment next June." The introduction of the American system of fearlessly promoting the vigorous young man would be of undoubted benefit to Indian education but it is likely to provoke the envy and jealousy of his fellows.

The English Elementary teacher, if certificated, can serve till he is 65 and is entitled to a pension provided by the National Pension Scheme in addition to the annuity and the disablement allowance. In India there is no pension scheme and the Provident Fund for Teachers instituted recently ceases automatically when the teacher reaches his 60th year. This Conference will do well to move a resolution asking the Government to continue its contribution till 65 or such time as the teacher is permitted to continue on the staff by reason of strength of body and alertness of mind.

May I take it that my intimate connection with Secondary education for over a quarter of a century entitles me to give expression to my observations somewhat freely and frankly on an occasion like this? Many are the criticisms that have been levelled against the system of Secondary education as pursued at present and particularly against the S.S.L.C. Examination. Some of the critics never cease taking a rosy view of the past when they were students and condemn whatever may be done for the present day young men. They would say: 'When we were young we did wonderful things, passed all examinations the first time; we never cared for games and dress; books were our chief concern. We studied them and passed. But nowadays boys care more for neck-tie and collar, tennis bats and footballs than for their studies; appear three

times for the S. S. L. C. before they are declared 'eligible'." I am an optimist and entirely disagree with those critics who think the present generation of students is degenerate and decadent. I know them and their teachers as intimately as I knew those that were in schools thirty years ago. I can confidently assert that there is a great deal of improvement both in teaching and in learning. Teachers of the present day are better trained and better equipped for the art of teaching and in spite of many disappointments and discouragements do their work from day to day with a greater sense of responsibility regarding education as something much wider than mere book learning. They take a more active part in the several activities of their school and evince a more intelligent interest in the social life of their students. The present day High School boy is more healthy and strong, has a better stock of knowledge of men and things in this world than his compeer thirty years ago. There is no doubt a general rise in their level of living and dressing without becoming either vain or pompous. The non-Brahmin and Muslim students of the present day are as keenly interested in their class work as their Brahman brother and there is every reason to hope that ere long they will overtake the latter in the race of life. Muslim boys who in olden days used to be the despair of their class-master have now learnt to discipline themselves in order to be more attentive to their work and duty. The general level of intelligence is much higher than before. The present day games and athletics, social life and Scout organisation have given them a new spirit unheard of in a former generation and a new love for duty, self-sacrifice, honesty and good work. The years from fourteen to

eighteen, the years of puberty and adolescence are the most critical years of the boy's whole development, when ideals are being formed, a sense of responsibility is developing, reason begins to govern action and when the mind is most receptive to influences, the effects of which last throughout life. That the teacher should be regarded as most skillful who can handle them tenderly and tactfully in fashioning their character and inspiring them with ideals of service and sacrifice.

In saying all this, let me not be regarded as being oblivious to the faults of the present generation. First, the present day student is apt to lead a fashionable and costly life, eager to get out of parental control and home discipline, because home life to him is not so attractive as one outside it. His excessive coffee drinking and intemperate cigarette smoking are two serious evils that should be put down with a firm hand. He is, however, gradually beginning to understand how the first is followed by reaction leading to listlessness and inactivity and the second weakens his throat and lungs, reducing his power of resistance and allowing germs of disease to invade his system more easily than otherwise. The recent G. O. on smoking within the precincts of school and college is a timely warning of the grave danger our students are exposed to.

Let me now turn your attention for a while to the public examination that is held at the end of the High School course. This is a qualifying examination, not competitive, used both as the school terminus and as an entrance test for the Madras University. The examination marks are entered in a certificate book issued to each pupil, side by side with his class work marks and there is no publication of results. After many strange vicissi-

tudes of which you are well aware, it has lost the advantages of elasticity and moderation by class marks and gained the rigidity of the old Matriculation which it came to replace. The various defects of the scheme and the School Final Examination have been exposed before the public any number of times and I do not want to repeat all of them here.

It has been said that the results of the public examination are most disappointing because many of those that appear are quite unfit and should not have been sent up. Even among those that secure eligibility for a University course, many are unable to follow the College lectures. There is so much waste of material, waste of energy, time and money, because of one hundred students who join the 1st year class only about ten leave the College with a degree. The University may not be far wrong in asking for a high degree of proficiency not only in languages but also in realistic subjects that form optional groups. The University should stand for culture and scholarship, ought not to admit those that are not likely to profit by the lectures of the College Professor. Any one entering the College should be able to leave it with a good degree and do some research work in the field of science and history, the results of which should add to the sum of knowledge already available and redound to the prestige of the University. The University should be not for the mediocre but for the highly intelligent, and above the average, not for producing colourless mediocrity but for bringing out men who can think and act scientifically and work at social, political and economic problems from a sensible and manly point of view. I may even go so far as to say that those that are above eighteen years of age should be disqualified from entering the Uni-

versity. As it is, boys of all ages and of different capacities join and the lecturers instead of lecturing and inspiring them with their splendid discourses work much harder than High school teachers, converting the College classes into glorified High schools. Parents have to find fees which are three times higher than what they have in the High school classes. About 60 or 70 of the hundred that join the first year class fail in the Inter, at the end of the second year and are turned adrift. No doubt the September examination gives them some occupation for a couple of years longer. By this time they are over twenty years of age and too old to join any school and the chances of learning something vocational or technical that will help them in bread-winning are lost! Waste of two to four years of life, waste of money, waste of much useful energy on the part of the college! All this could have been avoided, if they had joined some continuation or supplementary school to take up some practical occupation or to receive technical instruction in a special institution—in carpentry, cabinet making, foundry work, wood work, metal work, motor-car driving, etc. In a large town like Trichinopoly where I have gathered my experience, there is a large number of young men (for whom there is no end of writing out recommendations and conduct certificates in June and July) who after completing the S.S.L.C. course do not know what to do. Success in the examination does not ensure them success in getting a job; they cannot join either a Medical School or an Engineering College, because it means a laying out of Rs. 30 or 40 a month. There is no other school like the continuation schools of America and Germany with a vocational bias where not only the continuity of the educational process is secured but a vital relationship with the occupation of the pupils is established. In the absence of such schools

they join the college knowing full well that they cannot get on with higher studies. The "ineligibles" cannot even do that. They therefore rejoin the Sixth Form for another chance. In Trichinopoly there is a School of Commerce and a School for Typewriting and Shorthand, but they are run by private individuals and are not recognised by Government. So they are ill-equipped, ill-staffed and inefficiently managed. In all towns where there are two or three High Schools, supplementary schools of the type I mentioned above should be established or at least recognised by Government if managed by an individual. In England many philanthropic and voluntary agencies endeavour to provide adult schools, mechanics' institutions and working men's colleges whereby the masses would obtain a modicum of the knowledge which a defective provision of schools denied to them. Sometimes it is said that if technical and vocational institutes be started to help secondary school pupils it will be hard to find markets to absorb those that round off their courses. It is wrong to say so.

In this progressive age of Motor-cars and Aeroplanes, the Wireless and the Bioscope, workshops abound and manufacturing firms are on the increase. Trained hands with a knowledge of English and Science are wanted everywhere. There is a Government Institute at Madura opened in 1920 which provides a number of courses like oil and gas engine-driving, blacksmith's work, etc. It is reported that almost every student who has left the institute since its foundation has secured employment. The Secretary of the Committee of Direction for Technical Education in Bombay, writing of the technical schools in the Bombay Presidency, states that in many of the schools very few of the boys remain to

complete the three years' course and after one and a half to two years of training they get employment. Establishment of technical schools will facilitate the diversion of High School pupils to such schools. The Conference will be doing something practical if it resolves upon requesting the Government to establish such schools in Trichinopoly, Palghat, Salem and Cuddapah and to bring under their control the already existing private institutions by offering them recognition, grant and inspection.

The next defect as pointed out by critics is that there is so much waste going on in the upper forms of High Schools because of laxity in promotion and laxity in admission. Many boys should be in some place other than in High School classes. For reasons for this unhappy state of affairs we must go to the earlier stage of school life. Until 1916 there was the rule that pupils coming from an Elementary School should produce a transfer certificate and should not be admitted into a class higher than the fifth even if they had completed the eighth standard course in an Elementary School. This worked a great hardship, and some promising pupils from village Elementary Schools had to be kept down unnecessarily in a lower class. In response to representation, the Government removed the ban and abolished the system of transfer certificates in the case of Elementary School pupils. The Headmaster of a High School could examine such students and place them in such form or class for which they were found fit. This change has brought in its wake two evils in organisation. There is a rush of pupils from rural areas for urban Secondary Schools with a view to get themselves admitted into forms from the first to the fourth. A formal examination is held in

English and Arithmetic and by an impression test they are admitted. This kind of admission goes on in June and July and these admissions are bound to be very lax for reasons best known to you all. The next evil is much worse than the first. Boys who fail to get promotion in a Secondary School seek admission into the next higher class of another Secondary School on the pretence of having studied in no school or in an Elementary School. The Headmaster—a busy man indeed—asks one of his Assistants to examine and report. In 99 per cent. of cases, the report is favourable and the boy gets admission into a class for which promotion was denied in the first school. Gentlemen, such boys who are the products of the above two evils act as a drag in the class, causing irritation to the class-teacher, wasting his time and their time. It is not every teacher that can feed the slow and the backward, without starving the quick and the gifted. The clever boy, the exceptional boy and the boy of genius, must not be sacrificed to the dullards. That is the most difficult part of the teacher's work.

There is another set of pupils who are also found in the upper forms—pupils who have no liking for literary studies and whose bent is to industrial rather than to liberal pursuits. I have seen boys engaged in class in carving their initials on the desk or on pencil while the teacher was growing eloquent over the conciliatory policy of Akbar or drawing caricatures and composing doggerels on his master when he was trying to teach a formula in Algebra. It is a pity that such boys should be compelled to undertake a Secondary School course which is dominated throughout by the requirements of eligibility for a University Course. They are there because there is no

junior technical or industrial school to go to. With such a medley of pupils who manage to come up to the Sixth Form by dint of long service or by obtaining the barest minimum required for promotion, how can we expect the results to be otherwise? The defect is more a defect in organization than a defect in class-teaching. We should give a clean sweep to the whole system and order an entirely new organisation. There should be only one type of schools—Elementary Schools—from 1st standard to the 7th standard (the first four years being abbreviated into three) and in the first three years a knowledge of the Three R's should be inculcated. In the 4th year English should be taught intensively, along with it a 2nd language, History, Geography and Arithmetic should be taught. When the boys arrive at the 5th standard some pre-vocational subjects such as Village Sanitation, Agriculture and Co-operation should be added. At the end of the 7th year a qualifying examination should be conducted in each district by the High Schools of that district. The Secondary Education Board which has no business at present to transact might undertake to conduct that examination. Those that secure eligibility for a High School course and are not above fourteen years old should be admitted into the 4th Form. Those above fourteen and not declared eligible should be able to take up some work or to join some junior technical schools where subjects more in keeping with the environment of the pupils may be taught. Some of these may be trained to become village schoolmasters of the future. As the Interim Report says on p. 109: "As the development of education in rural areas and the work of rural re-construction proceeds, there will be required a host of men who have received a

good general education suited to the needs of their several callings. India should look forward to the day when her soldiers, policemen, postmen, builders and farmers will be literate and will have received that type of education which should be given in rural middle schools (or what we have been accustomed to call Higher Grade Elementary Schools). It is both wasteful and harmful that in many provinces almost the only form of education now open to boys who wish to pursue these callings should be that given in a Middle English School, the training of which is based on urban requirements and the main object of which is success in a Matriculation Examination."

So under the above proposed scheme, High Schools will have only three forms composed of students having an aptitude for higher studies and thus waste will be avoided. At the end of the High School course, the School Final Examination will select from among them students that are fit for a college course and under 18 years of age. There will be no more waste in the college and no longer will Professors complain that their students are unable to understand their lectures adequately, owing to their want of knowledge of English. May I say a word in connection with the English teaching in High Schools? There is some truth in the charge that anybody and everybody without a good knowledge of Grammar is asked to handle English. People who are qualified to teach the subject by having studied English in a special manner and by having undergone a special course of training for teaching English are not appointed. This is indeed a grave defect. Such ill-equipped and untrained men do not know how to teach grammar and composition, both oral and written. It is hoped that the Uni-

versity of Madras will arrange for a course of Christmas Lectures on the teaching of English in High Schools. Till such qualified teachers are available and in their absence, English or Anglo-Indian teachers may be tried under whose teaching pronunciation and composition are bound to make progress.

There are nearly 500 High Schools in this Presidency. Fancy all of them preparing for the same School Final and working with one objective, *i.e.*, securing eligibility for a University course. Can anything be more absurd than this strange slavish mentality? The teaching presents a deadly uniformity and is unrelieved by the faintest spark of originality—all the while the incubus of University dominating the whole course. Is it not possible for men of wealth and fortune to start schools on a new plan, on a residential system, something like the great public schools of England, which have sent out into the world rulers, statesmen and administrators? Though it is difficult to define exactly what is meant by English public schools (a certain American wag commenting on the same said that they were called English, because they taught so much Latin, public, because they were private, and schools, because two-thirds of the time they taught nothing but games) and in spite of many patent defects which we can avoid, they have made a unique contribution to education, and are at once the envy and despair of many countries affecting to despise them. These schools have a real measure of independence and are able to direct their own policy. Just because of their independence these schools are of peculiar value, for they are the spheres of influence of remarkable men, prophets of their own generation who can work out unhampered the ideal which possesses them,

In any great system of education it is essential that there should be a group of schools which stand outside it, where experiment can be tried and personality can find expression. There are so many Indian officials, ministers, judges and zamindars whose children are bound to occupy high positions in life and play a leading part in the different departments of Indian administration. They should be sent to a school where English, Vernacular and French or Hindi are taught, where the value of games is realised as an instrument for founding physical health, strength and grace, where such subjects as principles of economics, elements of social science, new community civics and politics may be taught—subjects that will be of great value to them in their future careers in the India-to-be. Such a type of schools will be found to work very well under modern conditions of life in India.

I am sorry, gentlemen, I have taxed your patience much. I should like to speak to you about the curriculum of studies, the inspection of schools, sex-education, institution of a Cadet Corps for each High School, Boy Scouts' organisation, relations between the Headmaster and his Assistants, the need for the formation of a Parents' Association in each town, but I must stop. One word more and I have done.

Throughout the ages, the teacher has been both a progressive and a stabilizing influence in society. He has never been known to cause a revolution or produce a crisis in the social order of things. As a seeker after truth, he has revolutionised thought; as the companion and guide of youth, he has been a great force for social control. As a leader in human affairs, he has raised teaching and related educational activities to a high plane of professional service. The school-master

of to-day has inherited much from the teachers of old. Socrates, Plato, Aristotle, with their trained philosophical minds formed theories that the modern teacher with his training in scientific method alone can verify. Rich is our heritage from the past and great are our responsibilities for the future. India is passing through a crisis in asserting her rights and claiming her birth-right to govern herself and to put her own house in order. The child of to-day becomes the citizen of to-morrow and the training of the child to become in every way fit to govern himself and his country when India will come into her own is entirely in our hands. If he succeeds in discharging the duties of citizenship with true magnanimity and right sense of patriotism, exhibiting such qualities of self-reliance, self-control, initiative, perseverance, strength of will and sympathetic comprehension of his neighbours, then the credit should be ours. Let us bring him up in behaviouristic freedom without being repressive in our methods. Let us exercise enormous opportunities of suggestion so as to set before the taught on every fitting occasion noble rather than unworthy objects of desire. Let us place before him a high example, a good tone, coupled with human sympathy, human comprehension and a true sense of proportion. Our calling is high and our duties are difficult. Let us humble ourselves and ask of the Supreme Being "that giveth to all men liberally and upbraideth not" wisdom and strength, so that whatever we may do for the present generation may be done "wisely and well," to the glory of God and the good of our country.

Let the beautiful song of Tagore be our daily prayer both when we begin our work and close the day:—

"This is my prayer to Thee, my Lord—
Strike, strike at the root of penury in my heart;
Give me the strength lightly to bear
my joys and sorrows.
Give me the strength to make my love
fruitful in service.
Give me the strength never to die with the
poor or bend my knees before insolent might;
Give me the strength to raise my mind
high above daily trifles,
And give me the strength to surrender
my strength to Thy will and love."

DRAVIDIAN "Mann."

By

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Tam. *mannu* (to remain); *manram* (assembly); *mannu* (earth); *manal* (sand); *manai* (to join, to marry).

Kann. *mannu* (to remain); *mannu* (earth, sand), etc.

Tel. *manu* (to remain); *mannu* (earth).

Kui. *man* (to be).

Gōṇḍi *mand* (to be).

Kurukh *man* (to be); *mankh* (to let in, to introduce).

Brāhūi *mann-ing* (to be).

I propose in this paper to suggest that these forms which are all related, may be ultimately traceable to the elementary Dravidian base *u* which is represented by other forms also in the different dialects.

This relationship has to be tackled with close reference to the possible changes of an ancient past; and my postulate will be based upon certain phonological changes some of which could be discerned still in the modern dialects, while others could be inferred to have occurred in an ancient past, from a comparison of modern forms.

My explanation of the relationship between *u* and *man-* may not be final; but in the absence of any better explanation for the origin of *man-*, the analogies suggested below would, I venture to think, render my view very probable.

I may say at once that the Dravidian forms are remarkably analogous in structure and meaning to certain forms occurring in other language-systems: Austric *man*, *men*; Indo-Iinese *man*; Indo-Germanic *men*. These

striking word-correspondences may or may not be fortuitous; but their very existence should warn us against being dogmatic in our discussion of the native origin of Dravidian *man-*.

Nevertheless, perspectives have to be envisaged, and the following discussion of mine proceeds on the basis that Dravidian *man-*, being a very ancient form in the literary languages of the South and occurring in all the modern dialects of the North and the South, is *native* in this family of languages.

The correspondence between the use of *man*, *men* of the central Dravidian dialects and of *mān* in the Austric dialects is of particular significance and may at once be pointed out here:—

Central Dr.

man or *man(d)* is used as (i) an auxiliary verb and (ii) in certain cases as the verb substantive (*vide infra*).

Austric*.

mān appears in the following dialects with more or less the same functions:—

Santālī	Kkasi: <i>men</i> .
Māhle	Mon: <i>mang</i> .
Mundāri	Semang: <i>moah</i> .
Birhār	
Dhangar	

Having stated the resemblance in structure and function between the Dravidian and the

* So far as these Austric forms are concerned, Rev. P. O. Bodding (on page 283 of his "Materials for a Santālī Grammar II") suggests: "We seem to have the root *me* to which *na* is added. What *me* is, is doubtful; it may possibly be a demonstrative root."

Prof. Przyluski (in a personal letter) thinks that *me-* of these Austric forms is *not* a prefix.

The etymology of the Austric forms has not, however, been studied fully by any scholar of Austric yet.

Austrian forms, let me now proceed to a discussion of the Dravidian forms from a Dravidian standpoint. In doing so, I am of course leaving out the difficult question of possible borrowing *open*, as we have no materials to work it out. I am basing this discussion on the view that the Dravidian forms may be *native* in this family.

Before I discuss the phonetic changes themselves, I shall describe here the functions performed by the *man-* group of forms in Dravidian.

(a) Tamil *mannu* (to remain, to be fixed, to be steadfast) is an *ancient* form, not used in modern parlance. It is found in the classics with the meanings given above.

In Tamil, *mannu* as such is not used as an auxiliary or as a verb-substantive, which functions are performed by *uḷ*. The other Tamil forms mentioned in the list given above are cognate with *mannu* (to exist, remain, etc.)

(b) Kui *man* is used as (i) a verb-substantive and (ii) an auxiliary.

(i) As a substantive verb with the meaning 'to remain' 'to exist,' 'to be present' (Winfield, page 123), it is used exactly like *uḷ* of the south in similar contexts:—

pēnu manenju (God exists).

ānu mai (I am here).

(ii) As an auxiliary:—*ānu tākai mai* (I am walking), etc.

uḷ is *not* used in Kui for these functions, though there exist in this dialect cognates of *uḷ*, e.g., *uju* (flesh), *uje* (truly), etc.

(c) Gōṇḍi *man(d)*:

(i) As a substantive verb:—

ḡḡ kōitor-k mattōr (they Gōṇḍis were).

In *ad dēste vorul rājāl mandul* (in that land a king lived), there is a slightly less generalised meaning implied in *mandul*; and this usage is quite parallel to the use of *uḷ* in contexts like the following in the south:—

Mul. *ā dēsa-ttu (v) oru rājāvu unḡḡyirunnu* (in that land a king existed).

(d) Kurukh *man* appears as a substantive verb in contexts like the following:—

pēskan sannir-ge manna mani (for young people to obey is = young people have to obey).

man does not appear to be used as an auxiliary in Kurukh.

(e) Brāhḡi *mann ing* is used for supplying the defective forms of the verb-substantive (*ar* and *uḷ*), e.g. *kanning matan* (doing was not = it was not done).

ḡ nā anta marek (What is he to you), etc.

It is not employed in Brāhḡi as an auxiliary, as in the central Dravidian dialects.

One of the verb-substantives in Brāhḡi is traceable to *uḷ*; its defective portions, it is worthy of note, are supplied in Brāhḡi by the forms of *mann-ing*.

It is clear that, at least so far as the semantic significance was concerned, the basic meaning of *mann* was identified with that of the ancient *uḷ* in this dialect.

Now, we shall proceed to try to find out the phonetic correlation between *man* and *uḷ*.

	V.	IV.	III.	II.	I.
<i>m-</i>	<i>ṽ</i> , nasalised	<i>v</i>	<i>ṽ</i> as a glide	Tamil-Kannāḡa	
<i>man</i>	<i>ṽan</i>	(v) <i>ḡn</i> (v) <i>an</i>	<i>ṽun</i>	<i>uḷ</i>	

Stage I is represented in the puristic pronunciation of the Tamil word; Stage II shows a slight dorsal glide perceptible in the colloquial dialects of Tamil and Kannāḡa. The glide is fully developed in Stage III represented in Telugu which also shows Stage IV in the colloquial where the already existing nasal affects the enunciation of the bilabial glide.

uḷ has cognates in all the dialects (see below) and is therefore ancient. Its use, however, as an auxiliary and as a substantive verb is limited to the southern dialects and to Brāhḡi.

Telugu *un-*, used as auxiliary and as verb-substantive, corresponds structurally and semantically to *uḷ*. (For phonetic alterations, see the analogies given below).

The dorsal on-glide *ṽ* is heard with greater or lesser conspicuousness in a nasalised form in colloquial parlance in Telugu. Where the on-glide is heard very conspicuously, the form becomes almost *ṽan-* (for analogies, see below).

The Kaikadi dialect shows *ann-* performing the functions of Telugu *un-*.

The next processes of change, postulated by me on the basis of analogies (for which, see below) are:

$$\bar{v}an > \bar{v}an > man.$$

The nasalisation of *ṽ* and its further development to *m-* probably occurred under the influence of the nasal already existing in the word. (For similar instances, see below).

Analogies:—

I. The production of the dorsal on-glide is quite a characteristic feature of most Dravidian dialects. In colloquial speech, it appears sometimes as a fully developed bilabial (*cf.*

Kittel's Kannāḡa Dictionary, page 1369; Manner's Tuḷu Dictionary, page 6; and the observations of Trench on page 5 of his Gōṇḡi Grammar).

This peculiarity is probably an ancient one, as shown by instances of ancient words given below, in which the bilabial appears to have become permanently incorporated. The extant tendency of Dravidian to develop the on-glide before initial vowels is probably therefore representative of an ancient stage which has affected the development of forms.

I shall take up one typical instance where the relationship of forms may be explained on the basis of this principle.

ol- is an ancient base represented in its elementary state in Tamil, Telugu, Kannāḡa, Tuḷu, Malayalam and Kui. The meanings are 'to be fit,' 'to be attached,' 'to be required,' etc. When we compare this base with numerous other Dravidian bases with initial vowels, like *il-*, *uḷ-*, *el-*, *ēr-*, *āl-*, etc., we find that the basic meaning of the form *ol* should have been derived, as in the other forms, from the demonstrative or deictic significance of the initial vowel. Indeed, the vocabulary of the southern dialects *teems* with such forms whose basic meanings are *directive* in character and therefore are closely associated with deictic significations conferred by the demonstrative vowels appearing initially with greater or lesser modifications. These forms, let me observe here, are not *peculiar* to the south, but possess cognates in the central and northern dialects with structural and semantic modifications which could be traced back to these primary forms appearing in the south. Thus, if we take the instances given above, *il-* (place) as such and in its modified form *ir* (to remain), possesses

representatives not only in all the southern dialects but in central and north Dravidian also.

il- as a locative affix exists in Gōṇḍi, Kui and Brāhūi, with slight modifications.

il- as a formative suffix exists in Gōṇḍi, Kui and Kurukh.

ir is represented by the following forms:—

Gōṇḍi: *irrāna* (to keep).

Kui: *jāmba* (to rest, subside); for the explanation of this form on the basis of analogies, see my paper on "Kui Forms and Dravidian Origins."

Kurukh: *irt-* (to place down).

Brāhūi: *ann-ing* (to be); the first portion of the auxiliary *assu*, where *ass-* is developed from older *ar* + past affix *-t-*.

Similarly, *u* (to remain) has the following cognates:—

Kui: *uju* (flesh), *uje* (truly).

Gōṇḍi: *urr-* (to become set, closely attached), *uskal* (pestle); formative suffix *-ul* in *parol* (name).

Kurukh: *ujja* (flesh); *ujna* (to have life); *ulā* (inner room).

Brāhūi: *ust* (heart).

If then we consider *ol** to be a primary base, the relationship of the following developed forms will become clear:—

Dr. *val* (to be fit, to be strong, powerful).

Telugu *valayu* (to be required, to be desired).

Telugu *vale* (like), Kui *valle* (like), Tamil-Kannāḍa *pōle* (like)?

* *ol-* exists in all southern dialects, while Gōṇḍi *osk*, Kui *oska* and Kurukh *oss* (all of which have the derivative meaning "to sew") are probably related. Cf. also Dr. *or-* (one) which is closely allied to *ol-* and is represented in all Dr. dialects.

The origin of *v-* in these forms has thus to be considered to be secondary.

Similar explanations could be given for the initial bilabial *v-* of every one of the following also.

Tam. *vaḷakkam* (practice, custom).

Tam. *oḷukkam* (flow).

vaṇaṅgu (to be obedient) „ *aṇaṅgu* (to yield, submit).

var-ai (mark) „ *orai* (to rub).

val-ay (to suffer, to roam) „ *al-ay* (to roam).

vari (paddy, rice) „ *ari*.

Kannāḍa *baḍi* (to beat) „ *aḍi*.

Telugu *vaḍu* (to cook) „ *aḍu*.

Gōṇḍi *vāḷ* (to wave the tall) Tamil *āḷ*.

Tulu *vāl* (to hang) Tamil base *al*, *āl*.

Gōṇḍi *baḷ* (to touch) „ *off*.

In a few instances with the initial front vowel *i-* also, the secondary *v-* appears to have become permanently incorporated:—

Tamil *viy-ai* (to praise) Tamil *iyai*.

„ *viḷi-* (to be lost, destroyed) *iḷivu* (destruction)

Now, whatever the origin of this ancient *v-* may have been, whether it is only a developed on-glide appearing before initial vowels, or whether it is an attenuated remnant of an ancient affix-word, there appears to be hardly any doubt that the words with initial *v-* given above are secondary in origin, the allied forms with initial vowels being original for the reasons adduced above all the probabilities, one might say here, suggest that in the case of this secondary *v*, we have to trace it ultimately to the dorsal on-glide *v̥* appearing characteristically in Dravidian before initial dorsal vowels of words.

Hence, the change of *u* to *vu* heard regularly in modern colloquial Telugu and

occasionally in colloquial Kannāḍa may very well have been an ancient change itself.

II. We next proceed to discuss the change of *v > m*. The phonetic process suggested here is that the bilabial has been nasalised, to begin with, by the influence of an already existing nasal (as in the modern dialects of the south—cf. Tamil *vāṇḍan*, etc.); and then the nasalised bilabial has changed into *m*.

This change occurs medially very freely, e.g., Mal. *kāṇ-uvān*, *kāṇmān* (for the purpose of seeing), etc.

What we have to prove here is the change of *v > m* in initial positions; and for this purpose a sufficiently large number of analogies from the forms of the different Dravidian dialects will have to be adduced. We are dealing with an ancient change here, and therefore would be justified in choosing our illustrations from the different dialects, provided only we assure ourselves in each case that the *v-* forms are original* and that a reasonable ground for the change is provided by the nasalising influence of an already existing nasal.

These conditions appear to be satisfied in the following instances:—

Tamil	Tamil
<i>vāṇam</i> (sky) ~	<i>māṇam</i> .
<i>vaṇṇān</i> (washerman) ~	<i>maṇṇān</i> ,
<i>viḷuṅṅ</i> (to gulp) ~	<i>muḷuṅgu</i> .
<i>vaḷ-</i> (to bend), <i>vaṇ-</i> ~	<i>maṇi</i> (to bend).
<i>vaṇaṅgu</i> ~	Kannāḍa <i>maṇaṅgu</i>
<i>vāḷ, vāṇ</i> (to desire) ~	Kui <i>maṇḍ</i> ~
	Gōṇḍi <i>māṇḍ</i> (to desire)

* For, we cannot overlook the possibility suggested by forms like *masūri*, *vasūri* (small-dox), *marikka-māvu*, *varikka-māvu* (American flour) where *m-* is original and *v-* is secondary.

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Tam., Tel., Kui <i>vin-</i> , <i>ven</i> (to hear) ~	Kurukh <i>menna</i> . (to hear).
Tam. <i>vin-ai</i> (work) ~	Malayālam <i>mena</i> .
Tam. <i>vin</i> (that which shines, sky) ~	
Gōṇḍi <i>mīnko</i> (stars),	Tam. <i>min</i> (to shine.)

In the following instances, however, there is no nasal already existing in the base; and yet the initial *v-* seems to have changed to *m-*. It is not clear how the process of change may have been initiated here. The *v-* forms are undoubtedly original:—

Tam. <i>viḷi</i> ~	Tam. <i>muḷi</i> .
Tam. <i>val</i> (strong) ~	Tam. <i>mal-</i> in <i>mallan</i> (strong man).
	Tam. <i>malai</i> (mountain), Tam. <i>mallu</i> (fight).
Kannāḍa <i>māḷ</i> (be- wildement) ~	Tam. base <i>ve-</i> (to be hot).
„ <i>mālu</i> (to hang) ~	Tam. <i>vālu</i> .
„ <i>mallaḷi</i> (perplexity) ~	Tam. <i>valay</i> .
Mal. <i>malay-</i> (to be perplexed) ~	„ „
Mal. <i>mīḷuka</i> (to return) ~	Tam. <i>viḷ-</i> in <i>viṇḍum</i> (back, again), cf. also Tel. <i>ven</i> in <i>venukāḍi</i> , and Brāhūi <i>va</i> (back).

Mal. <i>meraḷu</i> (to be frightened) ~	Tam. <i>veruḷ</i> (fear).
Gōṇḍi <i>maḷka</i> (leprosy) ~	Tam. <i>reṭṭai</i> .
„ <i>marukh</i> (to fry) ~	Tam. <i>varukh</i> (to fry).
Kūvi <i>mār</i> (light) ~	Tam. <i>veḷ</i> in <i>veḷuppu</i> , etc.
Gōṇḍi <i>mas</i> , Kōi <i>mas</i> (to burn) ~	Tam. <i>ve</i> (to be hot, to burn).
Kurukh <i>mekh</i> (to burn) ~	„ „
Gōṇḍi <i>maiā</i> (to become) ~	Gōṇḍi <i>aiā</i> southern <i>āg</i> (to become).

Gōṇḍi <i>māla</i> (time) ~	I. A. <i>vāḷa</i> .
Brāhūi <i>mukking</i> (to stammer) ~	Tam. <i>vikku</i> , <i>vukku</i> .

Tulu *maipu* (to place) ~ Tam. *vai*.

Tam. *maḍ-ai* (to fold) ~ Tam. *vaḷ-ai* (to bend).

Kui, *midḍa* (child) ~ Tam. *piḷḷai*, Tel. *biḍḍa* (child).

III. *l* or *ḷ* may interchange with *n* or *ṇ* in Dravidian as in the following instances. Phonetically, the lateral sounds easily change into the nasals, or *vice versa*. Usually, the originals in Dravidian appear to be the laterals.

Tam.	Tulu.	Kann.	Tel.	Kurukh.
<i>kḷ</i> (to hear).	<i>kān</i> .		<i>kān</i> .	

<i>ḥeṇ</i> (woman).				<i>ḥello</i> (woman).
---------------------	--	--	--	-----------------------

-*il*, -*in*, the locative

termination	- <i>in</i> .	- <i>in</i> .	- <i>in</i> .	- <i>in</i> suffix.
-------------	---------------	---------------	---------------	---------------------

<i>koḷ</i> (to take on).	<i>koṇ</i> .	<i>kon</i> .
--------------------------	--------------	--------------

uḷ appears as *un*- in modern Telugu itself. Kaikaḍi *ann*-, Yeraḍi *and*- also show the nasals instead of the laterals.

-*n*, therefore, in *man*, etc. may be traced to an original lateral.

IV. It now remains for us only to explain the open character of the vowel in *man*, etc.

The incorporation of the on-glide *u* before the initial dorsal vowel *u* or *o* changes the character of these into more open sounds. Cf. Telugu *vakka* (one) for *okka*, Kannada *vāram* for *ōram*, Tamil *oḷukkam* and *vaḷakkam*, etc.

The various analogies given above for the several stages in the change of *uḷ* to *man*, together with the remarkable similarity in the use and function* of *uḷ* and *man* in various contexts in the different dialects, would render this relationship of these two *apparently* dissimilar bases very probable.

* The preference shown by Gōṇḍi and Kui for *man*- as the auxiliary verb and as the verb substantive is probably attributable to the influence of the Kolarian languages on the central Dravidian dialects.

The more conservative southern dialects retained *uḷ* for these purposes and the *man*- form were given slightly different connotations.

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EDUCATION WHICH DOES NOT EDUCATE.

By

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"Education should not aim at a dead awareness of static facts, but at an activity directed towards the world that our efforts are to create."—
BERTRAND RUSSELL.

THE deplorable condition of the Indian rural community is rendered at least partially intelligible by the village school situation. The horrors of the one are matched only by the evils of the other. What the pupil learns at school is not any more promising than the conditions under which he learns it. In this article attention is focussed on rural education.

"Such primary education as is provided," states a distinguished Indian leader,* "is of an impractical character. The cultivator and the craftsman view it with disfavour, as tending to estrange their boys from their surroundings and to make them dissatisfied with their hereditary calling without necessarily fitting them for any thing better." Dealing with the same subject, writes an Englishman† whose position and experience render his judgment on many matters dependable: "It is a problem that the British Government have as yet hardly considered. The schools that they have so far established in the villages have but little relation to the facts of village life. They are not really designed to educate villagers, but to be the first rungs of a ladder leading up to the University."

Although most village children are brought up in an atmosphere where illiteracy prevails "reading, writing and arithmetic, in their most formal phases, compose almost the whole present curriculum of the village primary school. Much time is wasted in the reiteration of material already learnt. Other subjects are slighted unless they are stringently required by the regulations and the inspecting staff.*" "It must be said, however, that so far as the education codes are concerned, a certain amount of leeway in the curriculum is often allowed, and that in some areas geography, history, nature-study, drawing, physical exercise, etc., also are taught.†" Sewing is usually provided for girls. Though no clear distinction is drawn between the curricula for rural and urban schools, actually fewer subjects are taught in the villages than in the towns. A serious trouble with the present curricula is their rigidly logical organisation into watertight subjects.

Reading is poorly taught. In addition to the difficulty of mastering the alphabet with 200 to 500 sound combinations, there is the extremely inadequate provision of reading books. In many villages there are only one or two books for the whole school, and even these are unsuited for use in village schools. The teaching of writing is inefficient in the extreme and therefore takes a needlessly long time. Grammar is emphasised a great deal and is begun early. Reading and writing are taught most often by the alphabet method without sufficient motive on the part of the child—hence the amazing lapse into illiteracy.

* Oicott Mason: *Village Schools and Teachers in India*, p. 116.

† Report on the Progress of Education in India, 1912-17.

* Sir M. Visvesvaraya: *Reconstructing India*, p. 268.

† Bishop Whitehead: *Indian Problems*, pp. 155-6.

Arithmetic is difficult and uninteresting.* "Far too much attention is given to memorization and the shouting of tables and mechanical drill, and too little to measurement. Much valuable time is often wasted in the daily repetition of a lifeless routine."† This describes not only the teaching of arithmetic, but the general method of teaching village children.

The Education Departments have often tried to encourage handwork, like clay-modelling and rope-making, and have met with indifferent success. The children have little interest or respect for work of this kind, as it is presented now, and it is generally even worse taught than the subjects involving facility with letters. As a result, children do not get enough practical work, and are denied the educational value of such activity.

Education in India in general and in the villages in particular can hardly be said to be adapted to the needs—economic, physical, social or intellectual—of the people. It tends to accentuate the weaknesses, and encourage the undesirable tendencies easily noticeable everywhere. It is not evident that the rural curriculum consciously counteracts any of the dominant evils wrought by long standing custom and tradition. In other words, village education not only does not remove the handicaps of the villager, but in many cases tends to strengthen their hold.

"The failure of the Indian educational system to train character has often been

* Children in the second year of the Bombay schools are (or were?) required to know multiplication tables up to 80 times 10.

† Olcott Mason: *Village Schools and Teachers in India*, p. 117. "We frequently proceed from the unknown to the unknown, and a boy's memory is the only faculty which is cultivated." *Education in Bombay*, 1921, p. 16.

criticised, and with justice."* The material now taught in the villages being largely separated from rural life, does little to start the children making any improvement in the economic, physical and social conditions under which they live. Co-operation and missionary zeal for service are rarely instilled through the school. A social attitude that will overcome the barriers of caste, creed and colour, and develop a sense of responsibility for community welfare has yet to be developed through the introduction of constructive activities to be carried on in association with others. If a social atmosphere is to prevail, class work should not be conducted by methods which suggest a Drill Sergeant on inspection! "Social interest and understanding cannot be properly developed in a school the content of whose curriculum and method of whose class-room isolate the thought life of the pupil from the large community interests about him."† In the words of the Missionary Commission on Village Education in India, education should not be a mere means to a moral life, it should be the life itself. The truest education, therefore, is that whose administration, curriculum and method of teaching, are most permeated with the social spirit.

Village schools generally do nothing to encourage thinking, since their predominant emphasis is on absorption and memorization. Long dependence on the authority of custom and tradition has made unquestioning faith and implicit obedience almost a part of the villager's second nature. Where superstition has a stronghold, and fear is a powerful force, there is no better remedy than the cultivation of the habit of thinking. And

* *Report on Indian Constitutional Reforms*, p. 151.

† *Village Education in India*, p. 77.

yet Indian education has not begun to supply it. Conformity rather than initiative, resignation rather than adventure, is so definitely the outcome of modern education in India that Gandhi's criticism that it develops a "slave mentality" is fully justified.

Village education has been altogether too literary. The Calcutta University Report says: "The cultivator has not yet learnt to value education as an equipment for his life. He often fears, not without reason, that his children may be tempted away from the land by a system of training which has no bearing upon the work in the fields.* From the emphasis upon reading and writing and the enormous time spent on acquiring those skills, it is clear that the practical side is bound to be neglected. This defect is an inevitable manifestation in the primary grades of what is characteristic of the whole system of British education in India.† Doubtless literacy is a very desirable possession and urgently needed, but even more than that is to be coveted health, and means of livelihood. If the school had any obvious and direct bearing upon the well-being and progress of the community, it would stress health, hygiene

* Report I, p. 27.

† "The British Indian Government (which) gave to those classes that welcomed instruction a system which is divorced from their needs in being too literary, and which produced, far in excess of the actual demands of Indian conditions, a body of educated young men whose training had prepared them only for the learned professions or Government services." Pillai, P. P. *Economic Conditions in India*, p. 87. Sir Valentine Chirol remarks that "our present system of Indian education in fact presents in an exaggerated form, from the point of view of the cultivation of the intellect, most of the defects alleged against a classical education by its bitterest opponents in Western countries, where, after all, the classics form only a part, however important, of the curriculum, and neither Latin nor Greek is the medium for the teaching of every subject." *Indian Unrest*, p. 120.

and sanitation most, but as a rule these subjects are almost entirely ignored in the rural curriculum. A good deal of play would be provided both inside and outside the school. The health of the community would be a matter of grave concern for the rural school, and well might it be. In order to improve the economic conditions of the village, great importance would be attached to hand-crafts, pre-vocational work, better methods of agriculture, a more wholesome attitude towards manual labour, and in general, pains would be taken to prevent a lapse into illiteracy, and education for leisure would be provided. "Practical education is, however, as urgently needed for Indian agriculture as for any other form of Indian industry. The selection of land and of seeds, the use of suitable manure, and intelligent rotation of crops, the adoption of better methods and less antiquated implements can only be brought about by practical education."* In other words the curriculum so far has not been linked up with the world into which the children are going. Nor has

* Chirol, Sir Valentine: *Indian Unrest*, p. 268. A propos the situation in India it is consoling to hear from the Official Report on Education in the Philippine Islands, 1925, that "young people, whether they leave before or after graduation, forsake the life of their own people, develop a contempt for manual labour, seek membership in the intellectual occupations, drift to the towns and cities and in many instances prey upon their more ignorant fellows. They lose all desire to participate in those basic economic activities of agriculture and industry, which have been the support of man since he emerged from barbarism, and which must remain his chief support for generations to come. They get no satisfaction from handling the plough, hammer and saw, but seek salaried positions in professions, commerce, or Government offices. To be sure, individuals must be prepared for such occupations, but no school that points in this direction can adequately defend the policy of attracting large numbers of pupils."

the school realized its obligation to the village. One of the main reasons why so little progress has been made towards the solution of the difficult problem of village education during the last several decades is that it has been dealt with in isolation. The village school has been a thing by itself, having little or no influence on the general welfare of the village community, and education has too long been conceived of as the teaching of 'subjects.' The system should take into account the self-sufficing independent character of the Indian village. A large majority of the children educated in the schools will have to stay in the village and take their part in its life and work. Nor can we afford to forget that we have to deal with life as a whole and not in compartments. Dirt, debt, drink, disease, caste, child marriage, infant mortality, immorality, and ignorance, are so closely related that it is impossible to deal effectively with any of them in isolation. "If in education one is seeking an adjustment between the child and environment, this will not be attained by divorcing the school environment from all the child has known and will experience."*

* Missionary Commission Report on Village Education in India, p. 77.

PRE-MUSALMAN INDIA

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BY

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CHILDREN'S CLUBS: THEIR CONTRIBUTION TO EDUCATIONAL PROGRESS

By

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(Continued from page 283.)

NUMBER RECREATIONS.

Number Recreations can be grouped under the following heads:—

1. Number Games
2. "Think of a Number" Series.
3. Telling the age or ages.
4. Number Studies, Number Pyramids.
5. Curious ways of Multiplication.
6. Magic Squares
7. Short Cuts.
8. Others as Number Tit-bits.

Let me give a few examples under each of the above heads.

Number Games.

I. Where is your number?

Material required:—a Calendar sheet.

January 1930.

Sun.		5	12	19	26
Mon.		6	13	20	27
Tues.		7	14	21	28
Wed.	1	8	15	22	29
Thurs.	2	9	16	23	30
Fri.	3	10	17	24	31
Sat.	4	11	18	25	

FIG. 1.

A boy is asked to think of a number in the calendar. Another boy finds out his number by asking him thus: "Is your number in this row,"

(pointing to the horizontal rows one by one). Then he points to the vertical rows one by one and asks him where his number lies.

If the number thought of is 23, it lies in the 5th row horizontally and the 4th row vertically. No. 23 forms the meeting place of the 5th horizontal row and the 4th vertical row.

II. Show 3 numbers in a straight line.

2	3	✓
8	✓	3
✓		8

FIG. 2.

One boy marks 2 in any of the small squares in the above figure, another marks 3 in any of the squares. In the same way they go on marking their numbers 2 and 3 respectively. Whenever a boy has 3 numbers in a straight line he gets a mark. In the above figure, the boy who has 2 as his number gets a mark.

III. Making a square.

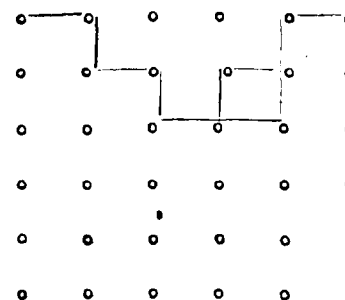


FIG. 3.

Two boys sit together and mark a series of dots as shown above. One boy draws a line between any two points. Another boy draws a second line. In the course of their drawing the lines, whoever makes up a square gets a mark.

The partner has the option to project the line drawn by the first player.

IV.

A 8		B 7
	E 5	
D 3		C 9

FIG. 4.

A figure of the above kind is drawn.

The children can mark any numbers they like in the places marked A, B, C, D, E.

One boy is to hide the numbers and the other boy to tell the number in the centre after getting two results from his partner. The first result is the sum of $A + B + C + D$ and the other is the sum of $A + E + C$ and $B + E + D$.

The answer is got by halving the remainder of these two numbers. The secret is that the central number has been added twice to the second result.

Think of a number.

1. Think of a number, say from 1 to 10; multiply it by 3; then add 1; multiply the total by 3 again and again add the original number you thought of.

Solution.—Strike off the last digit which is always 3. The number left out is the number thought of.

Why?—By multiplying by 3 and again multiplying by 3 and adding the number thought of, we are multiplying the original number by 10.

But we add 1 after first multiplying by three and multiply that by 3. So we add 3 to ten times the original number.

2. Think of any number, say from 1 to 10. Multiply it by 2. Then add 10. Give half to

Ganesha the Belly God. Then from the other half subtract your original number. I can now say the balance left.

Solution.—The balance left is always half the number given to be added. Any number can be added but the above process should be followed.

3. Think of any number from 1 to 10. Multiply it by 2. Then add 2 to the product. Again multiply the sum by 5. Again add 5 to the product. What is the sum now? From that I can tell you the number you thought of.

Solution.—Strike off the last digit which always ends in 5. Deduct 1 from the number left and that is the number your friend thought of.

Why?—Any number multiplied by two and then again multiplied by 5 gives 10 times the number. But when you add 2 and then multiply it by 5 you add 1 more ten. If you again add 5 at the end, you add 1 ten and 5 units. If you take off the 5 units and 1 ten, you get the remainder 5, 6, 7 as the case may be, which is the number thought of.

$$5 \times 2 = 10; 10 + 2 = 12; 12 \times 5 = 60; \\ 60 + 5 = 65; 65 - 1 = 64.$$

III. Telling the age or ages.

This is similar to the recreations given in the "Think of a Number" Series.

(a) Think of your age. Multiply it by 2, add 5. Multiply this sum by 50. Now deduct 250 from this product. What is the balance? I can give your age from this number.

Solution.—The number at the end will always be in hundreds. If it is 800, the age is 8; if it is 1200, the age is 12.

Why?—Any number multiplied by 2 and then by 50 increases the value of the original number by 100 times. But you have added 5 and multiplied it by 50. That is, you have added 250

to the hundreds, and the same 250 has been deducted at the end.

Telling the ages of two persons.

Think of your age and of your brother. Do not tell me.

Multiply your age by 2; add 5 to it; then multiply the total by 50; now add the age of your brother; subtract 250 from this sum. What is your number?

Solution.—The hundreds represent your age. The tens and units represent your brother's age.

If your number is 806, your age is 8 and that of your brother is 6.

If the number is 1017, your age is 10 and that of your brother is 17.

(C) There is also a complicated way of telling the age. There is a truth in it. As 365 days make a year, the number 615 is given to you for subtracting and 365 is given for adding. Here there is an excess of 250. This is the number 250 which we subtracted in our original sum. This is intended to show that the answer is arrived at after a deep thought and a number of mental calculations.

Steps.—Think of your age; multiply it by 2; add 5; multiply it by 50; add 365; now subtract 615. What is your number?

Solution.—Here too the last number will always be given in hundreds. The answer can be readily given.

(D) Even by this process the ages of any two can be given. After multiplying by 50 you have to add the age of the other and then add 365 and then subtract 615.

IV. Number Studies and Number Pyramids.

If we take the number 9 and multiply it by 2, 3, 4, 5.....and add 3, 4, 5, 6 respectively, all the answers will end in ones as 21, 31, 41, 51.

Taking the numbers 8, 7, 6, 5.....multiplying them by 9, and adding 6, 5, 4, 3 respectively, all

the answers will end in eights as 78, 68, 58, 48, etc. In the same manner by taking a series of numbers and multiplying them by 9 we can get an arrangement of numbers as in a tower or pyramid. The following is an example of this kind of Number Pyramid.

$$\begin{array}{r} 0 \times 9 + 1 \\ 1 \times 9 + 2 \\ 12 \times 9 + 3 \\ 123 \times 9 + 4 \\ 1234 \times 9 + 5 \\ 12345 \times 9 + 6 \\ 123456 \times 9 + 7 \\ 1234567 \times 9 + 8 \\ 12345678 \times 9 + 9 \end{array} \quad \begin{array}{r} 1 \\ 11 \\ 111 \\ 1111 \\ 11111 \\ 111111 \\ 1111111 \\ 11111111 \\ 111111111 \end{array}$$

All the ones in the answer are arranged in the form of a tower. It is not necessary that children should learn to know the value of the number. By mere multiplication by 9 they can form this pyramid. It gives practice in multiplication of all numbers by 9.

Taking the numbers in the inverse order as 9, 8, 7 and multiplying them by 9 and adding 7, 6, 5 respectively, we will get a pyramid of numbers all composing 8.

$$\begin{array}{r} 0 \times 9 + 8 \\ 9 \times 9 + 7 \\ 98 \times 9 + 6 \\ 987 \times 9 + 5 \\ 9876 \times 9 + 4 \\ 98765 \times 9 + 3 \\ 987654 \times 9 + 2 \\ 9876543 \times 9 + 1 \\ 98765432 \times 9 + 0 \end{array} \quad \begin{array}{r} 8 \\ 88 \\ 888 \\ 8888 \\ 88888 \\ 888888 \\ 8888888 \\ 88888888 \\ 888888888 \end{array}$$

In this way any kind of pyramid composing of numbers 1, 2, 3.....can be obtained.

V. Curious Ways of Multiplication.

(A) The Russian Method:

If we want to multiply 365 by 81, what we have to do is to write down these numbers thus:

$$365 \times 81$$

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Then we must be going on halving the multiplier till we come to one. If during the process of halving we have halves, we can ignore these halves. If the number is 42½, we ignore ½ and put only 42. Then we must go on doubling the multiplicand and write them opposite to the numbers in the right-hand column. We continue this doubling till we reach the 1 in the right-hand column. Taking the above example we get the following numbers:—

365	×	85*
730		42
1460		21*
2920		10
5840		5*
11680		2
23360		1*

Then we add those numbers in the left-hand column which are opposite to the odd numbers in the right-hand column which are indicated by a star mark. So we add 365 + 1460 + 5840 + 23360 and we get the answer 31025. Verify by ordinary multiplication whether this answer is correct.

Why is this? If we want to multiply 15 by 8, we can multiply 15 by 2 × 2 × 2 and get 120 which is equal to 15 × 8.

If we want to multiply 15 by 13 we can multiply 15 by 2 × 2 × 2; add to it 15 × 2 × 2; and add to it 15. Then we get 120 + 60 + 15 = 195.

This same principle is involved here.

(B) The Ancient Method of Multiplication:

By taking the following example, we can work it in the following way:—365 × 81.

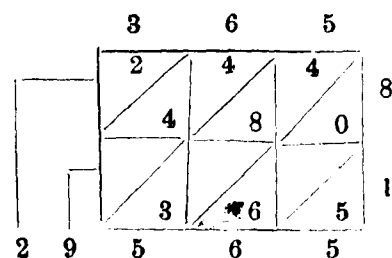


FIG. 5.

Draw a figure with 3 squares in length and 2 squares in breadth. Also draw the diagonals of the squares as indicated in the figure above. Multiply 3, 6 and 5 by 8 and write down the products in the squares as indicated above. Then multiply 3, 6 and 5 by 1 and write down the numbers. If in the product there are no tens, you have to write down the number in the space right to the cross line. Now add the numbers within two cross lines. 29565 is the answer. Verify this by ordinary multiplication.

Here is another example worked on the above lines.

VI. Magic Squares.

This is indeed a charming recreation for pupils. They can form variety of three-column magic squares and learn the process involved in making up a five-column magic square. It is not necessary for them to learn why they do in the manner chalked out here. These are the ways in which I learnt the magic squares when I was a boy and I give out the same for being passed to the pupils also.

For a three-column magic square, the conditions are :

The number taken must be above 15 and should be exactly divisible by 3.

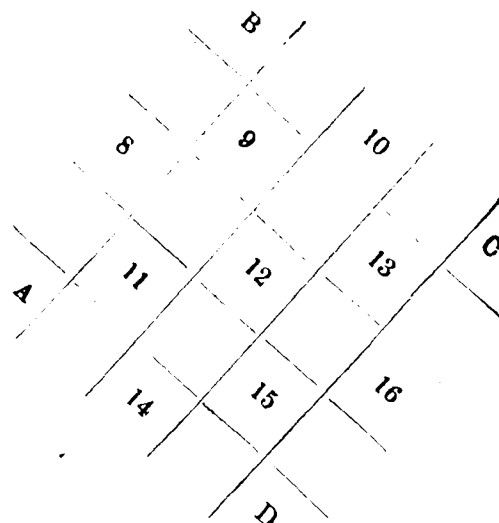
By adding three numbers in any correct order horizontally, vertically or diagonally, the given number must be obtained. The following steps indicate the method of arriving at the magic square. Take number 36.

Step (i) Find $\frac{1}{3}$ of 36; (12). Put that in the centre; write numbers 13, 14 successively after 12 and write numbers 11, 10.....before 12 in the following manner :—

8	9	10
11	12	13
14	15	16

(FIG. 6-A.)

Step (ii). Draw cross lines as shown here.



With 12 as the central square, form a new square with 3 columns each way. Then you can obtain the square ABCD. You can see that the square ABCD there are only a few numbers while a few others lie outside the square.

Step (iii). In this step we bring in the outside numbers inside the square in a particular order and then complete the square. No. 8 which is on the side of AB is brought to the central square to its opposite side CD. In the same way 1 lying between C and D is brought to the side AB. So also 14 goes between 9 and 13 and 1 comes between 11 and 15. The completed square will be similar to the following :—

A	11	16	9	B
	10	12	14	
D	15	8	13	C

A five-column magic square.

For this, the number given must be 65 and above it, and must be exactly divisible by 5.

Taking 90 as our number we can proceed in the manner described in the previous exercise. Only when we come to step iii (i.e.) in transfer-

ring the outer digits to the inner squares we will meet with some difficulty. $90 \div 5 = 18$. Put it in the centre. Then write the numbers 19, 20, etc., after 18 and the numbers 17, 16, etc., before 18.

Step (i)	6	7	8	9	10
	11	12	13	14	15
	16	17	18	19	20
	21	22	23	24	25
	26	27	28	29	30

(FIG. 6-B).

Draw the cross lines and make a five-column square inside this.

Step (ii)

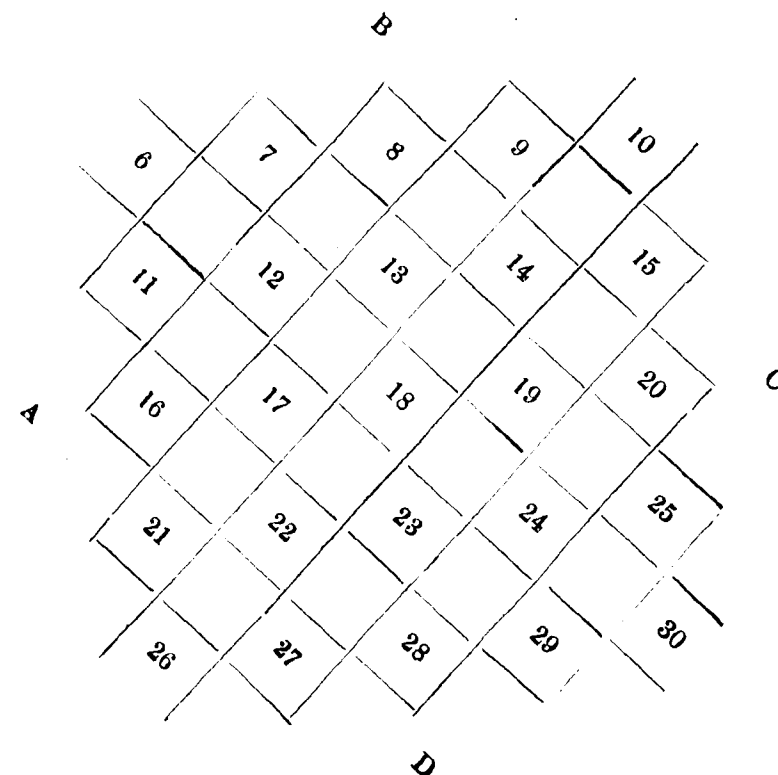


FIG. 7.

Step (iii) First take the numbers which lie far away to the centre number. They are 6, 10, 30 and 26. Bring 6 to the opposite side and nearer to the central number. So 6 will occupy the space between 18 and 24. Similarly 30 will go to the other side and near to the central number (i.e.) in the space between 18 and 12. In the same manner transfer the figures lying outside ABCD. Then you will get the completed square.

A	16	29	12	25	8	B
	9	17	30	13	21	
	22	10	18	26	14	
	15	23	6	19	27	
D	28	11	24	7	20	C

FIG. 8.

A seven-column magic square too is possible, but it will involve some difficulty in the transfer of figures. The number to be taken for this is 175 or above it and should be exactly divisible by 7.

VII. Short Cuts.

There are very many short cuts which the children can learn as a sort of recreation.

Adding a series of numbers from 1.

(i) Add 1 to 25;

Find half of 25 = $12\frac{1}{2}$;

Add $\frac{1}{2}$ to $12\frac{1}{2}$ = 13;

Multiply 25 by 13 = 325. 325 is the sum of all numbers added from 1 to 25.

(ii) Add 1 to 34;

Find $\frac{1}{2}$ of 34 = 17; Add $\frac{1}{2}$ to it: $17\frac{1}{2}$;

Multiply 34 by $17\frac{1}{2}$; $578 + 17 = 595$.

Square a number.

$$\begin{array}{rcl}
 47 \times 47 & = & 40 \times 40 = 1600 \\
 & + & 40 \times 7 = 280 \\
 & + & 7 \times 40 = 280 \\
 & + & 7 \times 7 = 49 \\
 \hline
 & & 2209
 \end{array}$$

Simplifying this process, we have

$$\begin{array}{rcl}
 54 \times 40 & = & 2160 \\
 (40 \times 40) + (40 \times 7) + (7 \times 40) & & \\
 \text{and } 7 \times 7 & = & 49 \\
 \hline
 & & 2209
 \end{array}$$

The process is known as *செருத்தி* in the indigenous method of multiplication. In the book of Indigenous tables called *செருத்தி* we have sums worked on the above model.

Even numbers involving fractions are multiplied in this manner.

$$\begin{aligned}
 8\frac{1}{2} \times 8\frac{1}{2} &= (8 \times 8) + (8 \times \frac{1}{2}) + (\frac{1}{2} \times 8) + (\frac{1}{2} \times \frac{1}{2}) \\
 &= 64 + 4 + 4 + \frac{1}{4} \text{ or } 72\frac{1}{4}.
 \end{aligned}$$

$$\begin{aligned}
 \text{By simplifying we get } (9 \times 8) + (\frac{1}{2} \times \frac{1}{2}) \\
 = 72 + \frac{1}{4} \\
 \text{or } 72\frac{1}{4}.
 \end{aligned}$$

This process is known by the name of *செருத்தி* in the above book of indigenous tables.

By application of this process of multiplication we can multiply any two digits by another number of two digits with the same number in the tenths' column such as

$$65 \times 63; \quad 87 \times 85;$$

The process of multiplication will be more simpler if the sum of the digits in the units' column is ten.

Such as 72×78 ; 83×87 or 46×44 or 35×35 ; 45×45 etc.

The following examples indicate the working:

$$\begin{array}{rcl}
 \text{i. } 65 \times 63 & = & 65 + 3 = 68 \\
 & & 68 \times 60 = 4080 \\
 & & 5 \times 3 = 15 \\
 & & \hline
 & & 4095
 \end{array}$$

$$\begin{array}{rcl}
 \text{ii. } 72 \times 78 & = & 72 + 8 = 80 \\
 & & 80 \times 70 = 5600 \\
 & & 2 \times 8 = 16 \\
 & & \hline
 & & 5616
 \end{array}$$

$$\begin{array}{rcl}
 \text{iii. } 85 \times 85 & = & 35 + 5 = 40 \\
 & & 40 \times 30 = 1200 \\
 & & 5 \times 5 = 25 \\
 & & \hline
 & & 1225
 \end{array}$$

VIII. Number Tit-Bits.

1. One cock will wake up one man. How many cocks will be required to wake up seven men?

2. One viss of cotton and one viss of iron; which is heavier?

3. If I break a twig once, I have two pieces. If I break the same 4 times, how many pieces will I have?

4. There is a square. If I cut away one corner, how many corners will it have afterwards?

5. Between two pillars there is one space. How many spaces will there be between 8 pillars?

6. There were a hundred crows on a tree and if a man shot one, how many would remain after?

The children are likely to give wrong answers by strictly applying the mathematical rules. The absurdities of their answers can be shown by actual demonstration. As for questions 3, 4, 5, these can be actually experimented upon.



FIG. 9.

Here are 3 vessels which could measure 3, 5 and 8 seers of oil respectively. The 8-seer vessel contains 8 seers of oil. With the other two vessels how will you measure 4 seers of oil and thus give the half to a customer?

Some Observations.

I have placed before the readers some examples under each head of the Number Recreations. It is open to teachers to search for more examples and practise them with their children.

Indian memory and Indian calculation are proverbial. But seeing the present generation of

children, one has to doubt if there was a time when the memory power was as high as it is proverbially said. We have to find out the ways in which the class-room lessons can also be carried throughout life and if some of the lessons taught for passing the examination are forgotten, these recreative exercises will at least be carried throughout life and again transmitted to their children. Do not these recreative exercises help in the application of the principles taught in the class-room? Child education through play is itself education in recreation. Unlike the class-room exercises these recreations in numbers create life and activity in children. For brighter children they come as a tonic and stimulant. If children are asked to prepare these exercises in cards, they take great pleasure in taking to this work very cheerfully and the teacher can expect to have a whole set of cards with the recreative exercises written, worked and clearly demonstrated.

III. GAMES.

We now come to the active work of the Children's Club. Apart from games like Football, Badminton or Cricket, we must also cultivate a desire for playing some of the important indigenous games and thus revive them. In reviving them we must be prepared to suggest to them new ways of playing the game and modify some of the practices which have been in vogue for a very long time. This is a very good form of "child study." Here I am going to explain some of the indigenous games. Some are in-door games and some are out-door games. I take a few examples from each. Let me first describe some out-door games. These are ball games, marbles, hopping games, etc.

Out-door Games.

A. Ball Games.

1. *Ganapathy Ball* (or *சைவரத்தி விளைய*)

The children arrange themselves on two sides. The captains of each side stand in front and

decide who is to commence the game by a toss. Those who are to commence hitting the stone stand near the goal and those who are on the opposite side stand arranged near and around the stone. The stone is the Ganapathy of this particular game. When after hitting the stone the ball is caught by any player of the opposite side, the boy who hits the stone is "out" and the next one in that side begins to serve. When the stone falls down, the servers arrange themselves in a way that none of the other side players approach Ganapathy so as to set him in proper position. When all the players on this side have served, the other side takes the place of servers.

2. Round Race.

The players form two sides. A big circle is drawn in the play-ground. One side stands near the circle and the players of the opposite side stand far away from the circle arranged in different directions in order to catch the ball hit from the player in the circle. The player in the circle hits a ball with his bat and if it is caught, he is out. The next boy on his side takes his turn in batting. The batsman, as soon as he hits the ball, goes round the circle and counts the number of runs. The side which has scored the largest number of runs is the winning side.

From these we can see that the children had already made a beginning in the Cricket of modern days.

3. The Tower Ball (தெருப் பந்த)

This is a very popular game specially played during the Pongal festivities and even elderly people take part in it. Circular tiles, seven in number of different sizes from the biggest to the smallest, are arranged in a tower. The children take two sides. One side stands at a distance from the tower. One boy in the side strikes the tower and makes it fall. The duty of the opposite side is to arrange the pieces in order. But the first group prevents the second from arranging it by striking the players with the ball. In the

course of striking, the ball may go away to some corner. During that time, some of the boys of the opposite side manage to come near the tower, arrange the pieces and set them in position. Then the game ends. The opposite side may then take the lead in striking. The game is thus continued by the remaining players taking their turns in striking at the tower when their turn comes to them.

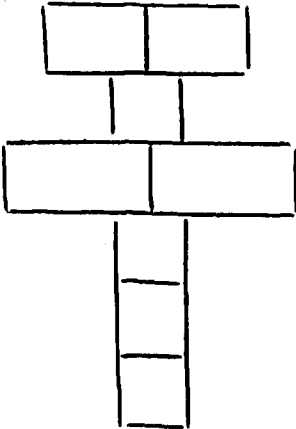
4. The Devil Ball (பேப் பந்த)

It is a funny game played in broad streets or the spacious grounds in or near temples, riversides, etc. The boys stand at a distance from each other. Some one throws the ball up and any one who catches it strikes the other boys with the ball. The next one who catches the ball hits the others and so on the play is continued.

B. Hopping Games.

பாண்டி ஆடுதல்.

(1) The children's brains are as quick at inventing as those of men's. If the latter use their power in inventing new sciences, the former exert their power in inventing new plays. The latest addition to the "Hopping Games" is the "Aeroplane" type of game. The design drawn on the ground is on the model of an aeroplane.



X Starting place.
FIG. 10.

A small circular brick is the only material to be used in this and other hopping games of this kind. The rules of these games are many. They differ with different sets of children and at different places. The rules, though too many, are very easily learnt by constant practice. The rules of the game are strictly adhered to and enforced when necessary. The most important rules in this particular game are (1) one should not stop at the place where the brick is thrown, (2) the brick should not touch the boundary lines, (3) when there are two places, the children can halt placing one leg in each space, (4) when they reach the two spaces at the top, they immediately turn round and stop there.

(2) A second variety is played with the following design drawn on the ground.

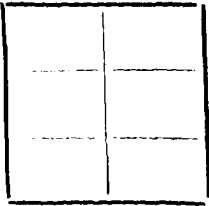


FIG. 11.

(3) Two other designs have been described in previous issues.

It will be highly interesting to watch groups of two and three boys playing these games.

Marbles.

These are also common in many places. The following are some types :

(1) Three pits ○ ○ ○

(2) One pit and not allowing the partners in aiming their marbles so as to fall into the pit.

(3)



FIG. 12.

Two sides are chosen for playing this type.

In all these marble games, it would be highly interesting to notice the severe rules they frame now and then. Teachers who may interest themselves in the games may advise children to be more lenient and sympathetic towards their playmates. The cruel practice of knocking against the knuckles may be discarded while the penalty of pushing the marble with the knuckles may be retained if some sort of penalty is found necessary.

If only we argue with them and if they find they are reasonable, they surely take to our suggestions heartily. The spirit of "Fair-play" should be created in children. Some children show partiality by hitting one's marble hard and another's soft so that the former will go some feet distant and while the latter will be left close to the post or in a position advantageous to the boy. Children as a rule show some leniency to children younger than themselves which is of course a praiseworthy feature.

So we could see that the play spirit is very predominant in all these indigenous out-door games. But many of the types in hopping and marble games cannot be played by a large number of boys forming a group.

In-door Games.

1. If chess is a fashionable in-door game, the fifteen-points game is as much an intelligent game as the modern chess. Adults sit for hours and hours together in that game. The design is something like the following :

பதினாந்தாம் புள்ளி or பதினாந்து ஆடு, புலி .

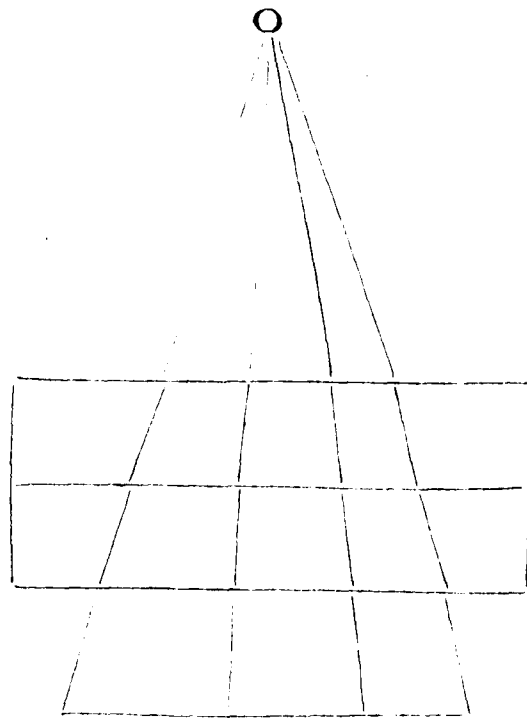


FIG. 13.

Three small stones and fifteen tamarind seeds respectively represent three tigers and fifteen goats. The goats should not allow themselves to be devoured by the tigers. The tiger can move one space in any direction along the line. One tiger is always kept in reserve at the top of the design which will also begin to move in times of emergency. This game is also marked by patience, thought and judgment.

2. Here is another form of indigenous in-door game. It is called **புலி**. The design is similar to the following :

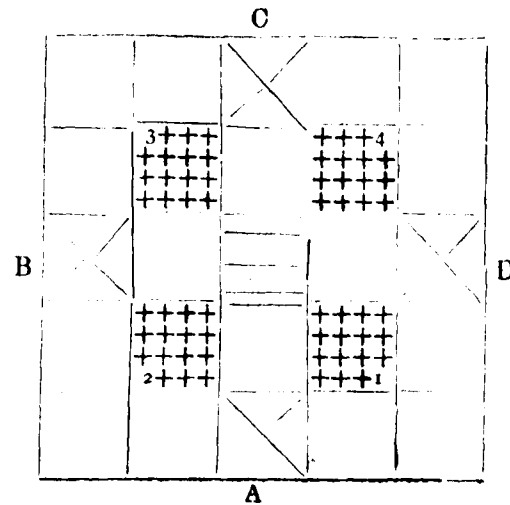


FIG. 14.

Four players sit on 4 sides and the squares marked X are the starting points for the 4 players. The materials required are 4 cowries and 16 tamarind seeds, each player taking 4 seeds. The cowries are shuffled and thrown out each time. In finding the number formed by throwing the cowries, the following convention is uniformly adopted. The cowries as all know have a fully closed surface and another partly open surface and when throwing them some are likely to fall with closed surface up and with open surface up. The number given to these throws are :

4 closed surfaces up	...	8
3 closed surfaces up and one open surface up	}	...
2 closed surfaces up and 2 open surfaces up		
One closed surface up and 3 open surfaces up	}	...
4 open surfaces up		

There are ever so many rules in playing these games. The ultimate end of the game is to see that the tamarind seeds get into the centre. They are moved in singles or in

pairs. Whoever moves the pairs into the centre in the soonest possible time overcoming all obstacles is the winner. The movement is always towards the left side of the square marked X. The square marked 1 indicates the gate by which A's seeds could enter the inner square. Similarly 2 represents B's gate, 3 represents C's gate, and 4 indicates D's gate. The entrance to the central square is the square just below it. The entrance is effected only when the player gets one by throwing out the cowries. The other rules can best be studied by observing the players themselves.

3. The third game is the one known as Pallanguzhi (**பல்லாங்குழி**).

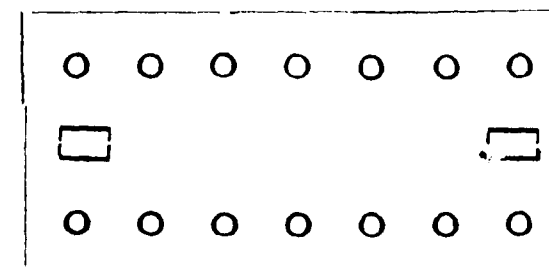


FIG. 15.

A plank with 14 pits, and 146 small cowries or tamarind seeds are required. Two, three or four players can play the game. The two middle pits are common to all while the rest 12 pits are equally shared by the players at the commencement of the game. The two small depressions in the tablet indicated by the two rectangles are places for keeping the cowries won by the players. At other times all the cowries may be kept inside these. These are so made that they can be folded and kept in tact. The two middle ones are known by the name of "Kasi." Each of these have only one cowry at first. The other 144 are equally distributed

to the 12 other pits, each pit having 12 cowries. By practice it may be learnt how it is possible to win by beginning from a certain pit. The beginner takes the 12 cowries from the pit, puts one in each of the other pits in the left-hand side and if these are finished he goes to the opposite side in the same direction. If in the act of dropping one cowry in each pit he stops at a pit where there is no cowry at all, it is his privilege to take away all the cowries in the pit to the right of the empty one. But if the fortune pit be the "Kasi," he may not take it at once. Because it is common to all the players of the game. If by chance the other players happen to win it in the manner indicated here, such of those who are the winners of that fortune equally divide the contents of the "Kasi." At the end it may happen that some people amass a large number of cowries and others left with a few.

4. A common in-door game is the picture of the "Ascent to Heaven." **புலி**. The underlying idea is to find out how quickly a good man can enter heaven and how tedious and hard it is for the wicked to enter the gates of heaven. For the former, the ascent is by means of ladders provided in the middle of the picture, the ladder increasing in height as one goes up and up, while the descent for the wicked is provided by means of serpents. Leaving all these, one could see the value of the game in ready counting and moving of the discs of the respective players. Any number of players can play and it will be better if the number is fixed to four. Each player must have a disc different from the other. The 4 cowries mentioned in the second game are required here and the numbers assigned to the throws of the cowries above are equally

applicable here. If one has eight after throwing the cowries he has got the privilege of throwing the cowries a second time and get another number. The picture is very cheap and groups of children of three or four can play the game with a picture. The other rules are best to be studied by watching the game.

Games for large number of players.

If these out-door and in-door games are only to be played by a limited number of players, there are other games which could be played by a large number of players. Examples :

1. *Puss in the corner.* கான்கு முகித் தாச்சி.

The original idea is to have 4 players in each of the 4 corners who are mice and one boy who is a cat. But the game may be adapted to a large number of players. The players all excepting one may stand in two rows leaving space between one another.

Mice O O O O O O

× Cat

Mice O O O O O O

The mice play and run from one place to another when the cat is away from them. The cat is watching for the time when he can get into a hole and catch hold of a mouse. When he catches hold of a mouse the game ceases. But the game is continued by allowing the caught mouse play the part of a cat. There is brisk running-about in this game.

2. *Hide and Seek.* கண்ணம்பூச்சி.

3. *Leap frog.* The boys can form a circle and keep in position for leap frog and one can briskly jump over his fellow boys and take his place. The game is known as பச்சைக்குதிரை தாண்டல்.

4. *Kite-flying.* Even adults enjoy the game. There is always a competition in this game. But it is left for the teacher to plan

the right rules in the competition. Any number of players can take part in the game. If it is not necessary to enter into any competition, the children can at least enjoy flying kites in the open air. This kite-flying is always associated with a specific season of the year.

IV. HOBBIES.

The last item in the children's club is the provision for hobbies. The spirit of collection may be encouraged.

Children's Collections.

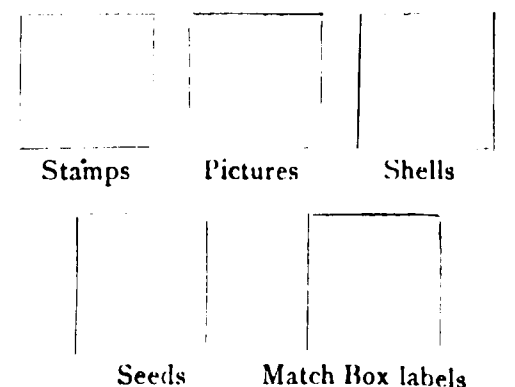


FIG 16.

Small Boxes may be kept for these various collections and the children can collect these, group them afterwards and then mount them. Thus these charts will contribute to the decoration of the room. The following may be a suitable list of hobbies :

1. Picture books.
2. Stamp album.
3. Leaf album.
4. Album of great men and women.
5. Collection of flowers and barks.
6. Wax models.
7. Wooden toys.
8. Dressing dolls and toys.
9. Cardboard or clay work.
10. Making screens or cages in brooms.
11. Collecting riddles or number puzzles.

12. Cutting out puzzles in pictures.
13. Picture cards.
14. Old coins.
15. Seeds.
16. Birds' feathers.

Children's share in the work of the Club.

The children can elect from among themselves a capable and energetic Secretary under whom may work in co-operation some other Assistant Secretaries who are to be in charge of the different departments of the Club. The Assistants will be in charge of—

1. Library.
2. Hobbies.
3. Garden and Decoration.
4. Sports.
5. Newspapers.

If one boy is not sufficient, two or three children can form into a Committee and look after the work of each department of the Club. The teacher is there to guide and suggest, always yielding into the good suggestions of the Secretary and the members of the Committee. The Club could have a small garden attached to it and the Decoration Committee should be always on the alert to present a good appearance of the Club and its surroundings. Boys are very enthusiastic when they see that their originality is appreciated. Let us therefore give full room for the display of their originality and ingenuity. This is more a children's club than the teachers', where the former have greater voice than the latter, and when they are left to themselves with some advice now and then they do things wonderfully.

Membership fees, if necessary, could be reduced to a minimum, the collection being spent in some useful manner such as the following :

1. Buying play materials.
2. Buying books for library.
3. Binding books.
4. Buying Picture books, etc.

Some money should always be kept in reserve. The villagers may be approached to give some donation to the Club. The library may also be formed by getting free books from villagers, teachers, etc., and from those residing in neighbouring towns. The teacher would do well to get old copies of the 'Times of India Weekly' for cutting out pictures. He may also try to get "The Hindu Illustrated Weekly" and look into the School Folk's Pages for suggestions for hobbies to children. These will be found very useful for children's clubs and will facilitate quick work.

Club Day Celebration.

The Club Day may be celebrated once a year getting donations from villagers for buying prizes for winners in sports and exhibitors of best exhibits. The parents of children can spend a pleasant day with their children. The teacher and the children should evince the sympathy of the villagers in all their activities.

Conclusion.

In the foregoing pages I have in a way endeavoured to show how a children's club may be formed so as to be a valuable adjunct to the school. It serves so many purposes and most especially of bringing the present and past pupils together. Children who may leave the school can be allowed to join the Club. This is a common place for learning and playing. There is great scope for the gaining of general knowledge apart from getting some proficiency in language and number. Play is the key note of the children's

club but the great organisation of work and direction of its activities should be carefully kept in mind by the organisers and sympathisers and promoters of this movement. Great attention is bestowed to make it attractive and useful to all children by making provision for indoor and outdoor games, reading room and playground.

An Appeal.

I strongly appeal to the readers of this journal to start Children's Clubs in their school and in the school under their control. Those who are in touch with Elementary School can organise one in co-operation with the teachers of Elementary schools, and suggest ways and means of working the club. I look forward to the day when each village can boast of a successful Children's Club.

MADRAS UNIVERSITY.

B. A. Degree Examination, 1932.

PART I—ENGLISH.

MILTON—PARADISE LOST, BOOK II, with Rs. A. Introduction and Notes, by W. B. H., M.A.	0 12
POPE—RAPE OF THE LOCK, with Introduction and Notes, by E. E. Kellett, M.A.	1 0
WORDSWORTH—SELECTIONS CONTAINING TINTERN ABBEY AND OTHER POEMS, with Introduction and Notes by E. H. Elliot, B.A.	0 12
SHELLEY—ADONAI, with Introduction and Notes, by W. E. Hoare, M.A.	0 10
LAMB—SELECTIONS FROM THE ESSAYS OF ELIA, with Introduction and Notes, by J. H. Stone, M.A.	1 4

SRINIVASA VARADACHARI & CO.,
4, MOUNT ROAD, MADRAS.

WHAT IS WRONG WITH OUR HIGH SCHOOLS?*

By Mr. C. N. RAGHAVACHAR, B.Sc.,
High School, Chickmagalur.

THE Hartog Committee which has collected elaborate evidence on all aspects of education in the country, authoritatively says that our High Schools are not what they should be.

Elderly men who passed out of schools and colleges, a decade ago, complain that the graduates of our High Schools can not write good English, have no taste for fine literature and have not a wide knowledge of English.

The parents complain that their children in the High School do not obey them, have no consideration for their feelings, no regard for the ancient tradition and are useless as bread-winners of the family after leaving the school. The politicians complain that the students are physically weak, and we as teachers when we get into the class-room feel that modern students are not earnest to learn and are not as attentive or pains-taking and self-reliant as we were in our school days. We feel that in spite of the best efforts of the best teachers, the class-room is wanting in a real atmosphere of a place dedicated to learning. The boys have neither the Sraddha of Nachiketa nor the reverence of Ekalavya.

The students on their part probably feel that what they learn at school is not of great material benefit and the whole farce has to be gone through under compulsion. I do not say that all parents, teachers and students, feel like this; but a major portion of the thoughtful do feel the want of realism or even of idealism in our schooling.

* A paper read at the Fifth Conference of the Mysore Secondary Education League, held at Shimoga.

But this long list of complaints need not make us despair; because there is one relieving feature. The material we have is not rotten; our boys have abundant energy as has been made evident on a number of occasions. They respond splendidly to any appeal to their sentiment and emotions. If properly organised, they are capable of doing a lot of social service—(I am talking from personal experience.)

Such opportunities for the proper use of the pent-up energy of our boys are rare in our schools. Though we may not like to be a generation behind the West, we are there in educational matters. The curricula of studies, the medium of instruction, the hours of work, the atmosphere of school life, the goal of High School education, all require a thorough overhauling.

One thing that dominates our work in the High Schools is the examination complex. Nothing is important if it has no bearing to the probable questions in the Public Examination. The students are anxious to learn just as much as they feel necessary to answer the questions in the S. S. L. C. and to secure a pass. What is the ideal of that pass—to get into the University and after that—a big blank! The vacant sky and the wide world are the only two ideals for him. The whole course in the High School is modelled with a view to prepare a student to the University. More than 60 % of the boys in spite of liberal valuation and moderation, do not get into the University and all of us as educationists do feel that most of even this 40 % are not fit for the University course. Still we have framed our whole syllabus to suit the small minority, sacrificing the interests of the larger class who are forced to drift as well as they can in the busy world. The University Professors

choose our text-books, set the question papers and decide the results and the schools are judged by the percentage of passes in the final examination.

Entry into the University, as the ideal of Secondary Education, is never conducive to the progress of a country and more so when the problem of unemployment among the educated is becoming very acute. There is very little similarity between the life at school and abroad. The subjects taught have no life interest to the student, inasmuch as they are more academic and abstract than of real practical use to him in after-life. Hitherto the chance of getting a berth in Government Service or at least the success of his educated elders as wage-earners, was a sufficient inducement for the boy to learn. The unemployment problem, and to a greater extent, the political upheaval all over the country, have brought their influence into the class-room and have created waves of disturbance. The students are restless and are not satisfied with learning abstract subjects. The outside atmosphere has a reaction on young minds and they do respond to the external stimulus.

We have got to harness and guide the enthusiasm of our young boys in the proper channel before they get beyond our reach. We have got to frame our courses so that the students after getting out of the schools feel confident of becoming independent economic units and contribute their full quota for the general wealth of the nation. The High Schools should cease to be the training ground of social parasites. The whole course of instruction should create a predominantly vocational bias, of course at the same time creating facilities for the minority that is fit to get into the University—(Modern psychology can

come to our aid in selecting the suitable course for boys.)

It is a hard problem to suggest off-hand the vocational subjects that can be introduced and the stage of such introduction and other necessary details. The industries in our country are not sufficiently well organised and there are not very many big industries which can absorb our young men after they leave the High Schools. Neither are there committees comprising of educationists and industrial magnates to advise and find employment for the young men. In the absence of these facilities or necessities, we can only choose such vocations, a training in which will help a student to live in a village or a town doing any one of the various occupations that others do but only doing it much better. The S. L. C. course has in its syllabus more than a dozen additional subjects including a number of vocational subjects like Smithy, Weaving, Carpentry, Electric-wiring, Printing etc., but few schools have got provision to teach all or even a few of these vocational subjects with the result that the majority of our boys take up either Mathematics or Drawing or Commerce as an additional subject. The four periods allotted for this course in the two years is not adequate to give a vocational bias much less does it help him to compete with the professionals in that branch.

If all our High Schools are held in the morning and better methods of instruction are employed, all the abstract and literary subjects can be taught in the morning and the whole of the afternoon made available for vocational training. If the schools in the morning can not provide instruction for all types of students, the boys can at least become wage-earners or apprentices in a Restaurant, a

Tailoring Shop, a Smithy, a Laundry, a Bookshop and a host of other small businesses.

The High Schools should ultimately train not only good managers of restaurants but also good cooks who know the vitamins value of the various foods and have a thorough knowledge of dietetics. This cannot certainly be had without proper training. At this stage may I make a suggestion? The Universities in India have been working so long and a number of brilliant graduates have come out of them; some of them had the opportunities to go to foreign countries and work in big factories and manufacturing centres. But we have yet to hear of these men as research-workers in our foods from a scientific point of view. The food, the sustainer of life, we have left to be supplied by the man without the Three R's.

The educated middle class and the upper classes are importing very many tinned foods in the form of rusks, milks, powders, biscuits and others. Should not our Universities organise research in the food products of the country and find out means of manufacturing parallel foods to the imported ones, now that they have come to stay. If the Universities pave the way in this, the High Schools can easily carry on the work.

Problem of Milk Supply is another which is an untapped field for work. Proper running of dairies, preservation of grass, care of cattle, preservation of milk, etc., might form another branch of study in the High School. Home-croft, fruit-culture and fruit-preserving can also be taught. The nature of the vocational subject taught should naturally differ from school to school according to the environment and the content of the school. Vernacular medium should be introduced early so that

the wastage of brain-power be diminished and the energy saved be utilised for learning useful manual work. The Industrial and the Agricultural Schools of the present day have not solved the problem as they are divorced from the administration of the Education Department and a certain inferiority complex surrounds them. Even the aim of the students coming out of the High School has so far been only to get into Government Service. When these Industrial Schools become a part of the High Schools, they can render better service to the students and a larger number of the High School boys can then be easily induced to take up manual work.

In the absence of Continuation Schools, the High Schools should aim at turning out better cooks, better farmers, tailors, dyers, salesmen, fruit culturists, weavers, cobblers

and a host of other rural workers. Let us give less of abstract mathematics and science to our boys and let us teach them more of practical science and make their muscles stronger and minds disciplined by manual labour. Then they will get enough of sobriety and attend better even to the abstract subjects, become physically more fit, take greater zest in life and become real citizens of the State.

India can not be satisfied by merely turning our young men into economic units but we should also try to unfold the spirit within each and the schooling should enable individuals not only to earn a living but also to give the best in him to the society at large. This can be done only when the Secondary School stops the University ideal and becomes a miniature world.

Books useful for Intermediate and B. A. Degree Examinations.

RS. A. P.		RS. A. P.	
A HISTORY OF INDIA, by C. S. Srinivasachariar, M.A., and M. S. Ramaswami Aiyangar, M.A. Part I—HINDU INDIA, with six maps (<i>Prescribed as a text-book for the Intermediate Examination of the Andhra University</i>)	2 8 0	INTERMEDIATE CHEMISTRY, by P. Lakshmi Narasu, B.A., Professor of Physical Science, Pachaiyappa's College, Madras. 3	8 0
— Part II—MUHAMMADAN INDIA—by the same authors	3 0 0	INTERMEDIATE PHYSICS, by the same author	4 0 0
INTERMEDIATE GEOMETRY (Theory and Practice), by M. Satyanarayana, M.A., L.T., and K. S. Patrachariar, M.A., L.T. 4th and Revised Edition	2 8 0	LECTURES IN LOGIC, by Rao Bahadur S. Mangesh Rao, B.A.	2 8 0
THE STUDENT'S COMPANION TO GEOMETRY, for the Intermediate Examination of the University of Madras, by K. Deva Rao, B.A., L.T.	0 8 0	STUDENT'S HAND-BOOK OF PSYCHOLOGY, by the late Dr. S. Sathianadhar, M.A., LL.D. (2nd Edition)	1 0 0
EXAMPLES ON TRIGONOMETRY, containing the F.A. Trigonometry Papers for 15 years, 1888 to 1902, with Solutions of all the Problems, by P. A. Subramania Aiyar, B.A., L.T.	0 8 0	QUESTIONS AND ANSWERS ON ELEMENTARY LOGIC, by M. Macmillan, M.A. 1	0 0
EXAMPLES ON ALGEBRA, containing F.A. Algebra Papers for 17 years, 1889 to 1905, by the same author	0 8 0	THE ELEMENTS OF HUMAN PHYSIOLOGY, by G. S. Ramasami Aiyar, B.A.	1 0 0
		B. A. EXAMINATION ENGLISH LANGUAGE, LITERATURE AND COMPOSITION PAPERS of 1881 to 1906 (both inclusive)	0 5 0
		F.A. MATHEMATICS—ALGEBRA AND TRIGONOMETRY PAPERS, with Solutions and Notes from 1901—1903, by B. Harumantla Rao, B.A.	0 4 0
		TAMIL COMPOSITION, by G. Damodara Mudaliar, B.A.	0 12 0

THE DEVELOPMENT OF MATHEMATICAL TYPE OF THOUGHT IN THE SECONDARY SCHOOL PUPILS.*

By Mr. G. NARAYANA, B.A., B.ED.

Mathematics Assistant V.G.H. School, Kirlampudi.

Now I wish to speak on the development of mathematical type of thought in the Secondary School pupils. Development of correct thought is undoubtedly the fundamental and the final aim of education. But in my present speech, I do not want to deal with the development of thought in general, but particularly on the development of mathematical type of thought. There needs be no justification for my preference. For mathematics, when it is taught properly and rationally, but not irrationally and pedantically as it has been done generally by inexperienced teachers and in poorly-equipped schools, affords a greater scope than any other school subject to develop the essential mental powers such as imagination, memory and reasoning. And, when these powers of mind are developed, thought which works as the result of the psychological combination of these different powers of the mind, acts efficiently and flows in the right direction.

Now, every real thinking both in mathematical and non-mathematical world, when analysed, seems to contain five psychological elements or steps:—

- (1) A problem.
- (2) All probable means for the solution of the problem.
- (3) Selection of the most necessary means.
- (4) Solution of the problem.
- (5) Verification.

* A paper read at the East Godavari Secondary School Teachers' Conference recently held at Samalkot.

In every act of thinking can be found the above five steps and in mathematics, they are more conspicuous by their frequent occurrence, than in any other school subject. In mathematics, a student is confronted at every step with a problem. The problem at once suggests to him different methods of which he then selects the proper method and finally solves the problem.

Mathematical thinking is exclusively problematic. A student of mathematics never thinks in *vacuum* like a dreamer, but always thinks in a particular manner which is exclusively characteristic of mathematics. This thinking is called to act upon any problem, and a problem contains two main steps: 1. The statement of what is granted (hypothesis). 2. What is to be done (conclusion). The business of a student is only to note down these two main steps and by a close observation of the relation between the hypothesis and the conclusion to arrive at the conclusion. My aim in the present speech is only to explain, as much as I can, how to arrive at a conclusion starting with a given hypothesis. The power of any one's mathematical type of thought is measured by one's capacity to draw the necessary conclusion starting with a given hypothesis.

This power of drawing the necessary conclusion in mathematics as well as in the practical world depends to a considerable extent on one's experience. It is a well-known fact that an experienced man acts better under a particular situation than an in-experienced one. Experience means, capacity to understand a situation with all its hypotheses with the relations existing among them and to draw as far as possible the correct inferences. In mathematics also experience counts for much. A student of mathe-

matics, in the beginning cannot distinguish between the hypothesis and the conclusion and he does everything under the direction of another. In the beginning his conclusions are accidental—he catches the right point as a blind ox goes into a green field by chance, but by no previous thought or effort. In the early stage the pupil is not at all capable of real mathematical thinking—he is in a world of fancy and rough imagination. In the formative stage, i.e., between 8 and 12, he is however able to think and reason. And it is the business of every teacher to see that it is not nipped in the bud; but is nourished and developed. When the pupil comes to 12, he becomes capable of thinking mathematically and the teacher should take every opportunity to try to develop the mathematical type of thought.

The need for the development of mathematical thinking in the Secondary School pupils is now felt more than at any other time. As you all know, mathematics of High School, especially of Elementary Mathematics is a bugbear to about 90% of the pupils. They go to school with a predisposition that mathematics is beyond their comprehension, that it is something strange and difficult. Starting with this absurd and foolish hypothesis they draw the conclusion that they never can understand mathematics and hence they never work. They do not see that in every topic there are certain principles and these principles help them to draw the required conclusion by noting down the hypothesis and by drawing the inferences with the help of the principles they have known. So it is now the duty of every mathematics teacher to impress on every one of his pupils that in every mathematical problem there are two steps, namely, the hypothesis and the conclusion, and he can

arrive at the conclusion by drawing his own inferences after a consideration of the known relations existing among the different hypotheses.

Having now considered the meaning of the mathematical type of thought with its different stages and its present-day need, it remains for me to consider the several factors and means of developing such a thought among our pupils. The different factors are the world, the parent at home, and the teacher in the school. While the school provides a student with an unvaried and routine experience, the world presents him a vast store of situations which require mathematical thinking. One may think that one cannot find the certainty of mathematical conclusions outside the school; but as a matter of fact, every act of one's thinking involves consciously or unconsciously the five steps of mathematical thinking. So a teacher should take advantage of this fact and he should give his problems a *local colouring*. In the teaching of certain mathematical principles also, the teacher must connect them with similar results in the world, e.g., to teach that $+2ab - ab$ equals $+ab$, it must be elicited that the net result of an income of $2ab$ rupees and an expenditure of ab rupees is ab rupees. In teaching the rules of signs

$$\begin{aligned} +a \times +b &= +ab \\ -a \times -b &= +ab \\ +a \times -b &= -ab \\ -a \times +b &= -ab \end{aligned}$$

they must be connected with parallel ideas in the world. When there is unity there is always a positive effect, and when there is no unity the effect is negative. Product of like quantities is positive and unlike quantities is negative. (ఎట్టయొడకు లాగ ఎవబోతు నీడకు లాగ. This means that $-a \times +b$ or $+a \times -b$

= $-ab$). Such a connection between the results in the world and the principles in mathematics fixes the principles deeply in the pupils' minds and helps them to draw correct inferences.

The function of a parent is not very great, unless he is capable of thinking considerably.

The teacher has almost the whole burden of developing mathematical type of thought on his own shoulders. He must be in the first place very resourceful and original. He must have the spirit of research and he must try as far as he can, to explain new things in relation to the old. This means drawing new conclusions after a consideration of all the possible relations of a given data. Given a triangle and the Pythagoras' Theorem, the pupil must be led to find the segments of the base made by the altitude and with the aid of this method he must be led to generalise the result and finally to find a relation between a side opposite to an acute or obtuse angle and the other two sides.

It must be a principle of one and every teacher that he should make no use of the 'rule of thumb' processes but he should make use of rational methods. As far as possible he is to make use of the heuristic and the analytical methods in algebra and geometry. He should not allow his pupils to attempt a problem in a haphazard manner without looking for the hypothesis and the required conclusion. The principles of every topic should be drilled properly and sufficiently. The teacher must try to distinguish essentials from the non-essentials and the essentials should be clearly indicated.

A word on the organisation of class teaching. The teacher should take pains to see that the note-books are maintained in good

order. The note-book should be numbered. The first few pages should be left to note down the contents. When a new topic is taken, it must be noted at the top of the page. At the end of every topic the teacher should give a summary on every topic.

These are some of the means of developing the mathematical type of thought. As the results of mathematical teaching are not effective and useful until mathematical thinking is developed in the pupils, the teacher should therefore aim at the development of mathematical type of thought by the employment of the up-to-date and rational methods. He should measure the general mathematical intelligence of his pupils not by the number of problems he has worked but by the manner in which he has worked those problems. He must develop in his pupils the *mathematical conscience*, i.e., the power to understand the hypothesis and the conclusion with their relations. One's power of thinking can be said to have been developed only when one is capable of grasping the hypotheses and the conclusion easily and accurately. The teaching of mathematics, which mainly aims at the development of thinking, is therefore successful when it succeeds in enabling its pupils to grasp any situation, mathematical or otherwise, with all its relations to other things.

Having thus dealt upon the different aspects of mathematical thinking, I now leave it for your consideration.

RAMNAD DISTRICT TEACHERS' GUILD.

ANNUAL CONFERENCE.

The Annual Conference of the Ramnad District Teachers' Guild was held on Saturday, the 28th of June, at Madura in "Sri Gopal Mahal." The President of the Guild, Mr. N.S. Venkatarama Ayyar, M.A., L.T., presided, and delegates attended from nine centres: Srivilliputtur, Watrap, Sattur, Virudhunagar, Manamadurai, Sivaganga, Tirupattur, Sirukudalpatti and Karaikudi. Mr. C. Damodara Mudaliar, the District Educational Officer, was kindly present. Before proceeding with the business of the Conference, the President heartily welcomed the Officer to the District of Ramnad and to the Conference and appealed to his co-operation in the work of the Guild. Mr. Damodara Mudaliar responded promising every help in his power and requesting the teachers to take all steps to shield their pupils from the baneful effects of the Civil Disobedience Movement.

After a few preliminary remarks from the President, the Annual Report was read, and after further observations from the chair, the Report was unanimously adopted. The salient features of the Report are:—

(1) The number of affiliated Associations rose from 17 to 19.

(2) Out of Rs. 222 to be collected as dues, only Rs. 69 was realised.

(3) Several schemes such as the Registration of the Guild under the Societies' Act and touring in the District by the President were held up.

The Budget was next presented and agreed to, noteworthy additions under charges being Registration fees of Rs. 50 and Deputation charges of Rs. 50. The election of office-

bearers came next, when Mr. N. S. Venkatarama Ayyar, M.A., L.T., was re-elected as President and Mr. K. R. Srinivasa Ayyar, B.A., L.T. (Karaikudi), as Secretary; and Mr. V. Aravamudan Ayyangar, B.A., was appointed as Additional Secretary.

The following resolutions passed at previous Conferences of the Guild were reiterated, all being unanimously adopted:—

(1) That chief examiners and assistant examiners for the S. S. L. C. public examination should be appointed solely from among those actually engaged in the teaching of secondary schools.

(2) That the S. S. L. C. Board be requested so to revise the Public Examination Time-table that there will be but one subject of examination everyday.

(3) That the authorities of the Madras University be requested to reduce the 40% minimum in English and 2nd Language to 35%.

(4) That this Guild emphatically deprecates any attempt to institute any public or semi-public examination prior to the S. S. L. C. or the Matriculation.

(5) That the S. S. L. C. Board as now constituted is unduly dominated by the University representation thereon, but that those that are engaged in secondary education ought to have predominant representation on it.

(6) That the District Secondary Education Boards and the Text-Book Committee are unduly dominated by persons who have but ostensible connection with secondary or elementary education; but that the representatives on these bodies should be mostly persons engaged in school-teaching.

(7) That the teachers be allowed to contribute 1/12 of their salaries towards the Provident Fund and that the Government be requested to raise their share to one-half of the amount standing to the teacher's credit, as the result of their own and the manager's contributions.

(8) That in the opinion of this Guild the minimum dress for a teacher adopting Hindu costume be (1) a white *dhoti*, (2) a white *jubba*; and (3) a white *angavastram*.

After the passing of the Resolutions, the rule about the quorum was altered making it 12 instead of 20 for a meeting of the General Body. The President then placed before the Conference a scheme for Inter-School Debates which was approved.

The Annual Conference terminated with a vote of thanks to the President, and another to Mr. E. M. Gopalakrishna Kone, who, besides placing his Mahal at the disposal of the Conference, kindly treated all the delegates and visitors to a hearty lunch.

ANDHRA UNIVERSITY.

Intermediate Examination, 1931.

PART I.

SHAKESPEARE—HENRY THE FIFTH, with ES. A. Introduction and Notes, by P. H. Sturge, M.A. ...	1	6
TENNYSON — SELECTIONS, containing Ulysses and other Poems, with Introduction and Notes, by E. H. Elliot, B.A. ...	0	8
MATTHEW ARNOLD—SONNET ON SHAKESPEARE contained in Sonnets and Songs, with Introduction and Notes, by E. H. Elliot, B.A. ...	0	10
TENNYSON—GARETH AND LYNETTE, Introduction and Notes only, by E. H. Elliot, B.A. ...	0	12
A HISTORY OF INDIA, Part I—HINDU INDIA—by C. S. Srinivasachari, M.A., and M. S. Ramaswami Aiyangar, M.A. ...	2	8
(Prescribed as a Text-book)		
A HISTORY OF INDIA—Part II—MUHAMMADAN INDIA—by the same authors ...	3	0

SRINIVASA VARADACHARI & CO.,
4, MOUNT ROAD, MADRAS.

Reviews and Notices.

LORD HASTINGS AND THE INDIAN STATES, BEING A STUDY OF THE RELATIONS OF THE BRITISH GOVERNMENT IN INDIA WITH THE INDIAN STATES, 1813—1823, BY MOHAN SINHA MEHTA—FOREWORD BY SIR P. S. SIVASWAMY AYYER—(D. B. TARAPOREVALA SONS AND CO., BOMBAY, 1930). Price Rs. 10.

This monograph treats of the external policy of Lord Hastings who gathered up the threads of Wellesley's policy and whose rule has been regarded as the inauguration of a new system of "isolation and subordinate co operation." The author has fully utilised the available sources among the manuscript records of the India Office, besides the whole of the published material; but as he himself points out in one place, he could not study and make use of Indian and unofficial sources (e. g., the uncatalogued and unpublished Maratha records at Poona and elsewhere). To this extent the treatment should be regarded as one-sided, though he feels hopeful that his conclusions would not be substantially modified by a future examination of other sources. He begins with a review of the situation as it was at the time of Hastings' accession to office, when the policy of ring-fence had largely come to be modified and limited by the system of subsidiary alliances and the complementary claim to control States that came under that system. His first scheme was to form a League of all the principal States under British hegemony, the members of which would have to surrender the rights of war and peace, but would enjoy real independence in their internal administration. The subsidiary States would remain practically unaffected by such a League; and the Governor-General only desired to force the independent States into the League. His policy however failed to receive the support of his Council which was of the opinion that the Sindia and other powers were internally too weak and disunited to force a war on the British. The rapid change, that was effected in the ideas of

Hastings, is declared by our author to have been only a change in emphasis from some parts of the plan to others but not in the basic principles which were growing stronger with time.

It was the Pindari danger and the Governor-General's rooted idea that the Sindia was at the bottom of it that strengthened him in his aim, supported as they were by Metcalfe, Jenkins and other exponents of the Wellesley school. He credited the Maratha powers with a greater sense of unity than was justified by their antecedents and his projected plans of alliance with Nagpur, Bhopal and Jaipur, though they failed and were opposed in his own Council, showed a change of attitude that was creeping in and that was put into definite shape by the Treaties of Nagpur in 1816 and of Poona in 1817. The war that followed enabled the full realisation of the Governor-General's aim in establishing full British paramountcy. The subsequent enlargement and amplification of this scheme was seen in the organisation of British relations with the States of Rajputana, Central India and Kathiawar.

The author tries, though not with convincing success, to justify the Governor-General's levying of tribute from Rajput States, which was only a continuance of the oppressive practice of Pathans and Marathas. His treatment of British relations with the subsidiary States of Oudh, Mysore, Baroda and Hyderabad is full and clear and above all shows an understanding of the point of view of these latter. The countenancing of the assumption of the title of the King of Oudh by the Nawab Vizier was an indication of Hastings' fear of the revival of the pretensions of the Mughal House. The part that the Governor-General played in the dubious transactions of William Palmer and Company at Hyderabad, has been detailed with great vigour in other books; but the characterisation of Chandu Lal in p. 185 is shrewd and admirable.

The description of the "operative ascendancy" of the British power by means of treaties negotiated

with other States, shows how eager Hastings was to blot out all vestiges even of shadowy paramountcy wherever it remained, whether at Delhi or at Poona, and how he deemed such a thing inconsistent with the sovereignty of the English Crown asserted by Parliament in the Charter Act of 1813 and entrusted to the Company. In the 9th Chapter the author makes an attempt to define the shares of sovereignty respectively claimed by the Paramount Power and left to the States. The period being one of transition, the British Government took away all the attributes of external sovereignty of the Indian rulers, which had already been, either explicitly or impliedly, formally conceded by the existing treaties. The problem of internal sovereignty was naturally a more complicated one. Hastings himself repeatedly urged that interference in the internal affairs of rulers was not within the province of the British Government and was supported by the Home authorities. But it was clear that the application of this policy was a difficult matter and the nature and degree of interference depended on the personality and temperament of the agents, some of whom were more interfering than others. One cause of the extension of interference was that the British Government often mediated between the rulers and their feudatories, guaranteeing protection to the latter even as against their overlords. The protection promised to the ruler against all his enemies, foreign and domestic, was incompatible with the full guarantee of complete non-interference; while the relative position of the Paramount Power and the rulers had changed too radically to be governed merely by the written words of treaties, particularly after the wars of 1817-18. Thus the author concludes that the internal sovereignty of the rulers can be accepted only with considerable qualification. Hastings' views with regard to internal intervention are best seen in his letter to Metcalfe, Resident at Hyderabad: he did not seek more than political supremacy, nor to control and direct

the daily administration of the princes. His political aim was attained by military means and was largely aided by a coherent diplomacy and unified strategy that were lacking in the case of the rulers and their agents. The classification of Indian States under British hegemony had become difficult under Hastings, while no Indian political law had as yet been constructed. Hastings' main achievement was the construction of the Indian political system which was taken by him outside the field of military and international considerations, and for which no applicable political formula has been made even till now.

The documentation and other supplementary paraphernalia are good; but the book as a whole forms depressing reading, tending as it does, to show India at the depth of her moral and military degradation and altogether mobbing in bitter dissensions and personal jealousies. Also, as the foreword shrewdly remarks, the topic taken up in this book shows, or impliedly at least demonstrates, how the Indian States system, stressing on the elements of personal rule, personal allegiance etc., tends to weaken the State and hinder the growth of the national spirit.

BALADITYA—A HISTORICAL ROMANCE OF ANCIENT INDIA—BY A. S. PANCHAPAKESA AYYAR, I.C.S., M.A. ILLUSTRATED: (D. B. TARAPOMEVALA SONS AND CO., BOMBAY, 1930). Price Rs. 4 or 7s. 6d.

This is one of the very few novels existing about the great historical events of Ancient India. Such books help us, old and young readers alike, to visualise to some extent the times, ideals, and personalities of our great historical heroes, who have left so little mark on our literature, due to the operation of a number of causes. Books like Kingsley's *Hereward the Wake*, Scott's *Ivanhoe*, Conan Doyle's *Sir Nigel*, and *The White Company*, Ainsworth's *Windsor Castle*, and *The Tower of London*, Weyman's *A Gentleman of France*, and Drinkwater's *Oliver Cromwell*, are yet to come in

the field of our historical fiction. This latter generally falls into three classes, viz., the leisurely story full of incident and generally containing a great deal of historical reference; the rattling adventure story, and the domestic and sentimental narrative. *Baladitya* partakes largely of the first and to some extent of the second types. It is a book for the adult, presuming a good amount of knowledge of the times of Gupta Decline and Hun Invasions and of the fundamentals of Hindu philosophical ideas; but it is bound to attract the attention of the imaginative student also; its greatest value is that, in spite of its small faults, it eminently serves as a back-ground for building the reader's structure of golden India as it was under the Guptas and how it suffered a rude shattering at the hands of the Hun, who however quickly came to be absorbed in the ever-vital stream of Hindu culture.

The shifting of action portrayed in the romance takes us all through India, from Ujjayini to Barukaccha, and thence to Kerala, Simhala, Kalinga, Kamarupa, Magada and the lands of the Yaudheyas and the Sudhavas. Toramana, the Hun invader, is known to have established his rule in Malwa prior to A.D. 500; and Bhanugupta, the king of Valabhi and many other local princes were his tributaries. Mihiragula is represented by all Indian tradition as a blood-thirsty tyrant; he was overthrown by a confederacy of the indigenous princes under the leadership of Yasodharman, a Raja of Central India, who is represented by the author as reigning over Mahakosala with his capital at Kalanjara in Jejakabukti. Hiuen Tsiang, the celebrated Chinese traveller, gives the sole credit for the victory over the Huns to Baladitya, the ruler of Magadha; the present-day view is that Yasodharman was responsible for the final defeat of Mihiragula. This view is upheld in this book; the bringing in of the distant rulers of Kanchi, Simhala, etc., the mention of traders going to Baveru which should have long ago vanished and a few other incidents depicted may not bear close

historical scrutiny: but these do not mar or in any way affect the general trend of action and the grand finale of the victory of Kanur is a proper setting to such a spirited romance depicting the achievement of Janendra Yasodharman who has been attempted to be identified by some writers with Kalki, the deliverer of orthodoxy from castelessness and oppression. The *dramatis personae* are too numerous to require any detailed mention; a few touches here and there, like Madhavi's attachment to Baladitya, bring into sly relief the author's reforming ideals. The part that Kalinga played in history is perhaps overwrought; the Chalukyas of the Deccan are brought into life a little too prematurely and Kanchi and Kerala are made to play parts which were geographically and physically impossible in that age. It is not our object to point out the inconsistencies and improbabilities in the story from the strictly historical point of view; we willingly and gladly commend the spirit and the setting of the narrative and wish it is translated into our vernaculars so that it may broadcast its spirit among our children and women-folk. The author, a bright teller of humorous short stories, has blossomed forth into a historical romance-writer of a fairly high order.

THE BUILDINGS OF OTHER DAYS, BY SIDNEY H. HEATH. (GEORGE PHILIP AND SON, LTD., LONDON, 1929). ILLUSTRATED. Price 3s.

The book, written and illustrated by the author is in three parts, dealing respectively with a castle, a church and an old town. The first part takes in the different types of the mediæval castle, the well-defined groups into which they fall, the Norman, Edwardian and later types of fortresses, the defences of it, the armoury, etc. Similar is the treatment about the various parts of a church, the chancel, the nave, the chapel, the crypt, towers, windows, belfry, spires, etc. The exterior sculpture of the old cathedrals and the monuments and brasses within them also are described. In the last part the growth of a town is traced, along

with a brief account of the origin of town-names, and of the religious, national and social ideas that have determined the forms of buildings in them, like walls, bridges, markets, schools, guilds, almshouses, etc. Lastly there is an account of the old-fashioned instruments of correction and punishments that were used by the town authorities, like the pillory, the ducking-stool, the thumb-screw, etc. The evolution of the different styles of fortifications, church architecture, etc., is part of the knowledge that the study of history should impart; and in this sense the book can be beneficially recommended to our teachers and school-libraries.

THE WORLD'S STORY TIME READERS, BOOK II—THE BOOK OF DESSERT—BY W. J. GLOVER. (GEORGE PHILIP AND SON, LTD., LONDON). Price 2s.

The volume, second in a series of four books, is one that would exercise children's imagination and stimulate thought in them. It is a collection of amusing and instructive stories culled from various sources, and is divided into a number of sections like "Story Time in England," "Story Time in Japan," "Story Time in India," and so on. The main object of non-detailed study is to make the scholars learn how to grasp the meaning of a passage for themselves and express it in their own words. The stories in the present volume are so lucid and direct that a child, say of the II Form, can easily make out their meaning and appreciate them. At the end of each story are appended exercises designed to test how far the scholar has grasped its content and exercised his imagination in filling up gaps and connecting threads in it. "The Indian Cinderella," "Tom Tit Tot," and "Little Thumb" are some of the best selections that fulfill important requirements of children's tales like vivid imagination, sustained interest, realistic dialogues and simplicity in style. The get-up of the book, cloth-bound and gilt-lettered, is attractive and is sure to induce in boys and girls a healthy liking for good literature.

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MILTON—ESSAYS ON MILTON WITH SELECTIONS FROM HIS WORKS, EDITED BY A. E. ROBERTS, M.A.—THE KING'S TREASURES OF LITERATURE. (J. M. DENT & SONS) Price 1s. 4d.

This book follows the fashion of printing selections from an author's work along with criticisms on the author—a fashion initiated, we believe, by the Oxford University Press. Among the critics on Milton represented in this book are Macaulay, Hazlitt, Birrell, DeQuincey, Johnson and Aubrey. Among the selections from Milton, apart from the poetry which is the greater part of them, there are two little pieces of prose. The editor adds at the end a note on the development of the essay. The book is neatly got-up.

INTERMEDIATE TEXT-BOOK OF ENGLISH LITERATURE, BY A. J. WYATT AND A. S. COLLINS, FOURTH EDITION. (UNIVERSITY TUTORIAL PRESS, LONDON). Price 8s. 6d.

This is a well-worn text-book, bringing the history of English Literature to 1800. It has had the benefit of much recent revision. A very useful Appendix provides the explanation of the names of the several forms of literature.

A FIRST ENGLISH COURSE, BY A. M. WALMSLEY, SECOND EDITION. (UNIVERSITY TUTORIAL PRESS, LONDON). Price 2s. 6d.

This is a book on grammar and composition written in very simple style suitable for use in the High School. The last chapter treats on reading and writing verse.

THE ADVENTURES OF JOAN-ALL-ALONE, BY PHYLLIS MEGROZ, WITH ILLUSTRATIONS BY G. G. FISHER—PHILIP'S NEW-PROSPECT READERS. (GEORGE PHILIP & SON, LTD.). Price 8d.

This is a children's story book and the narrative is a hotch-potch of classical and British legend. It is in this way an original contribution to the world of children's stories.

THE WORLD'S STORY TIME—THE NEW JUNIOR PROSE READERS, BY W. J. GLOVER, BOOK I—THE BOOK OF DELIGHT. (PHILIP & SON, LTD.) Price 1s. 10d.

These are ago-old nursery tales re-told in attractive language for children. The tales are not of one country and they are Indian as much as of any other country. The book is illustrated with apt illustrations both in black and white and in colours.

THE MADRAS UNIVERSITY LIBRARY REPORT—

We have pleasure in acknowledging receipt of a copy of the Administration Report for 1929 of the Madras University Library. The Library Committee takes the occasion to review the progress of the last six years. There has been naturally considerable improvement in all ways, the number of books issued has risen roughly in the proportion of 1 to 4½. The system of lending books has come into vogue. The hours of the Library have been extended and the open access system adopted. There has also been a useful classification employed in the arrangement of books. Altogether the Library has been made increasingly useful and valuable. We congratulate the Madras University authorities responsible for this.

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 Great Britain, India Office, Report of the Indian States Committee, 1928-29.
 British Crown and the Indian States.
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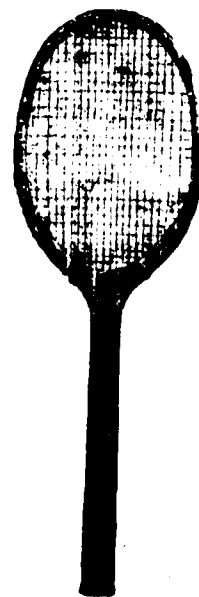
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The Educational Review.

In connection with the question of un-employment among the graduates of our Uni-versities which has at-tracted some attention in recent years, the University of Rangoon has started an interesting survey of the employment of its own graduates in Burma. The Registrar of the University has address-ed the following circular to various public bodies:—

The University of Rangoon believes that in the past its graduates have readily found employment. Statements have been made recently that some graduates have had difficulty in finding suitable employment. The University proposes to take stock of the position and to conduct a survey of the employment of all its graduates since the University was incorporated in 1920. On completion of the survey, the University will consider what changes of policy and what machi-nery or organisation are desirable to ensure that its graduates shall not become a drag on the market.

Government has kindly offered to assist the University in making the survey. Many, if not the majority of graduates, have found employment with Government, but a considerable number are to be found in the legal profession, a few in the Engineering and Medical professions, some in private schools and probably a few are now engaged in trade and commerce and possibly some are unemployed.

The University would be grateful if you would bring this letter to the notice of any graduate employed in your firm—who is a member of the Bar Association—who is a member of the Burma Medical Council—who is employed in any depart-ment controlled by the Municipality, Port Trust,

or Rangoon Development Trust, and ask him to fill in one of the enclosed forms and return it to the Registrar, University of Rangoon.

It will be remembered that the last Universities' Conference at Delhi recom-mended action on similar lines. We commend this to the attention of the other Universities in India, as an authoritative and comprehensive survey of this kind will help considerably in a solution of this problem.

We regret to have to record the death early this month of **The late, Prof. E. A. Horne,** the Prof. E. A. Horne. Pro-Vice-Chancellor of the Aligarh Muslim University. Prof. Horne was a distinguished member of the Indian Educational Service in Bihar and Orissa, whose services were lent only the other day to the authorities of the University. Professor Horne threw him-self into the work heart and soul and it was confidently expected that the University would soon be set on a proper footing. His sudden death has unfortu-nately prevented the fulfilment of such a hope and the loss is particularly serious at the present juncture, as the Vice-Chancellor is away in England and the Chancellor and the Pro-Vice-Chancellor (the Begum of Bhopal and the Nawab of Rampur) are also dead. In view of the recent troubles, the constitution has more or less been suspended and things are at a stand-still. It is hoped the Uni-versity will however still be saved.

We understand that Mr. C. R. Reddi, the Vice-Chancellor of the Andhra University, is soon to relinquish his office to enter politics. We are not surprised at the decision as Mr. C. R. Reddi has always been an active lover of current politics and it was perhaps with difficulty that he could confine himself within the somewhat narrow limits of such a purely educational office as the Vice-Chancellorship of a University. Owing to petty squabbles, the University has been handicapped a good deal in its initial stages, but it is time that an attempt was made to improve matters and start the University on its regular work. An active educationist thoroughly familiar with the work and organisation of a modern University should be chosen for the place, so that the University can make up for its initial stagnation. If an eminent educationist is not available in the Telugu districts at present, as we are afraid is the case, there is no reason why the University should not travel outside and secure the services of some eminent educationist of South India working in the North. The University would be lucky if it could secure the services of Sir C. V. Raman, Prof. S. Radhakrishnan or Prof. P. Seshadri, all of whom have special claims on the Andhra University. Apart from being a distinguished scientist, Sir C. V. Raman, it will be remembered, was educated at Vizagapatam. Prof. Radhakrishnan adds to his well-known qualifications as scholar and writer the fact that he is a Telugu by

**The Andhra
University**

birth though of a more or less Tamil district. Prof. P. Seshadri is a distinguished old boy of the Government College, Rajahmundry and the Venkatagiri Maharaja's College, Nellore, and a prizeman in Telugu. He has had a prominent part in the early organisation of the Benares Hindu University and has considerable experience of all the recent North Indian Universities. As Secretary of the Inter-University Board, India, and as President of the All-India Teachers' Federation, his claims should make a special appeal to the educationists of the Andhra world. We hope the Andhra University will be enabled to take its proper place among the Universities of India by the choice of a proper person as its next Vice-Chancellor.

The movement for a National Theatre is forging ahead in England and an organisation has actually come into existence for its early fruition. The aims of this proposed national theatre are stated to be :—

**A National
Theatre.**

(a) To provide in the capital of the Empire a theatre where the people may have continual opportunities of seeing the best plays of all ages worthily presented on the stage.

(b) To keep the plays of Shakespeare in its repertory.

(c) To revive whatever is vital in British drama.

(d) To prevent recent plays of merit from falling into oblivion.

(e) To produce new plays and to further the development of the modern drama.

(f) To produce translations of representative works of foreign drama, ancient and modern.

(g) To stimulate the art of the theatre through the varied opportunities which it will afford.

Time was when India was foremost in the world in the matter of dramatic literature and the histrionic art. Is it too much to ask that we should revive our best ancient traditions in the matter and organise a National Theatre which may voice the highest aspirations of the India of to-day besides exhibiting the best of our past? Our present obsession with politics is unfortunately so great that we have no time to think of anything else! This is a state of affairs which cannot be considered healthy for any country.

The indefinable charm of the ancient centres of learning is difficult to analyse, but the late Sir Herbert Warren, who was Vice-Chancellor of the University of Oxford for many years, attempted in the course of an article on *Oxford—Yesterday and To-day*, written just before his death, to explain the secret of Oxford. Its ancient atmosphere, in spite of the encroachments of the modern world is mentioned as its first charm. Sir Herbert refers to the numerous reforms carried out in recent decades. The Bodleian and other libraries have been expanded beyond recognition. The teaching of Jurisprudence has been made a special feature. Medicine has been developed and the adequate teaching of modern languages is also another achievement. There are lectures on all kinds of subjects, numerous clubs and societies, whose influence

on intellectual development is not less important than that of formal teaching in the class-room. The concluding paragraphs furnish an interesting comment, incidentally, on the duties of a University and deserve wide notice in India.

For what, with these multifarious activities does Oxford to-day prepare her sons? For what does she not? may rather be asked. Her studies, more specialized and "vocational," are still liberal in scope and spirit. For learning and science, for education with its ever-widening and sub-divided field, for Vice-Chancellorships, Principalships and Professorships, for teaching and administrative posts of every grade and sort the world over, it is hardly necessary to say, she prepares her sons and daughters. The roll of head end assistant-masters and mistresses, of education committees with their staffs, supplies the evidence.

In old days Oxford men joined the army by chance. Chance even produced an Admiral, Blake. But it was not by chance that Douglas Haig entered Brasenose and passed on to Sandhurst and the Cavalry. To-day a special Delegation supervises the training of military candidates and the O.U.O.T.C., with its air squadron just added, is an official link between the War Office and the University. The Home and Indian Civil Services, the Foreign Office and Diplomacy, the Consular and Colonial Service, the Sudan, the Tropics, for all of these Oxford furnishes recruits.

Outside and "above" all this, as some would say, are the arts and artistic professions. In painting, in architecture, in the drama, the old drama of the boards, the mechanized drama of the "Cinema," graduates of Oxford will be found managing, producing, performing. Yet again there is literature, both creative and critical, both ideal and practical, poetry and prose, history and

fiction The lucrative if precarious trade of journalism, sooner or later, draws in many sons, and some daughters of Oxford. The tradition of "Delane of *The Times*," of the other great dailies, of the weeklies and the monthlies changes but does not die. For all these Oxford seems still to afford peculiarly efficient preparation. To them may be added the still new avocation of the British Broadcasting Corporation.

We must congratulate the Hon. Sir Fazli Hussain on the successful termination of the Conference recently summoned by him at Simla to take steps for the formation of a General Medical Council for India. The Ministers and Surgeons-General and the representatives of Universities assembled for the purpose came to unanimous conclusions regarding the starting of a General Medical Council and the necessary constitution for the

purpose. It is probably a great tribute to the tact and resourcefulness of Sir Fazli Hussain that the proceedings should have been so unanimous in spite of the heterogeneous elements present. It is interesting to note that practically all the recommendations are on the lines of the resolutions passed at the last Universities' Conference held at Delhi and the more recent Conference of representatives of Universities held in Bombay. We hope the General Medical Council will soon be an accomplished fact and the medical experts in England will not be in a position to lord it any longer over the members of the medical profession in India and the Medical Faculties of Indian Universities which have always received a step-motherly treatment from the Medical Council in England.

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